

## A Catalog of the Syrphidae (Insecta: Diptera) of Korea\*

Ho-Yeon HAN, Deuk-Soo CHOI, Jin-Il KIM,<sup>1)</sup> and Hye-Woo BYUN

Department of Life Science, Yonsei University, Kangwon-do 220-710, Korea

<sup>1)</sup>Department of Biology, Sungshin Women's University, Seoul 136-742, Korea

---

**Abstract** We provide a taxonomic catalog of 151 nominal species of the Korean Syrphidae. They are arranged under three subfamilies, 16 tribes, and 62 genera. Based mostly on various faunistic survey reports, we listed any syrphid species with collection records from Korea, but, this time, we did not intend to confirm identifications by the previous workers except for very obvious cases. Therefore, a more comprehensive collection-based study is needed to confirm the actual Korean occurrence of each species listed in this catalog.

---

**Key words** Diptera, Syrphidae, Korea, catalog, distribution

### INTRODUCTION

The Syrphidae, flower flies or hover flies, are among the most common, most brightly colored and conspicuous, and most frequently collected of Diptera (Vockeroth, 1992). For the Korean fauna, Shiraki (1931) for the first time provided a serious revisionary work based on a collection primarily from Taiwan, Korea, Japan, and Sakhalin. In this revision, he described 302 species, among which 27 were from Korea. More recently, Kim, CW (1971) revised Korean Syrphidae, providing descriptions and illustrations of 82 nominal species. Kim, CW (1979) later provided detailed distribution maps of 34 Korean syrphid species. Kim, JI (1975, 1980) reviewed Korean syrphid references and provided a check list of 109 species with source references. ESK & KSAE (1994), in the most updated check list, included a total of 127 syrphid species without providing source references. Other than these major Korean syrphid references, there also have been a large number of faunistic survey reports scattered mostly in local journals and reports.

The present catalog aims at reviewing the syrphid references as many as possible, and list every single syrphid species with Korean records. However, we did not intend to confirm identifications by the previous workers except for very obvious cases. We followed the classification and taxonomic arrangement by Peck (1988). For convenience, we also provided the synonym lists by Peck (1988) for most species and those of Knutson et al. (1975) for a few species. In "Korean Records" sections for the

---

\* This study was supported by a grant from Korea Research Foundation (Project No. 9602055) as one of a series of projects under "Investigation of Useful Insects as Bioresources in Kangwon Province and Strategy for Their Conservation."

listed species, we tried to indicate a brief description of each cited article. For faunistic survey articles, the surveyed Korean localities were given.

### Subfamily Syrphinae 꽃등에아과

#### Tribe Syrphini 꽃등에족

#### Genus *Allograpta* Osten Sacken, 1875

TS: *Scaeva obliqua* Say, 1823.

##### 1. *Allograpta javana* (Wiedemann, 1824): *Analecta ent.*: 34 (*Syrphus*). TL: "Insula Iava" (Java).

자바꽃등에

Korean Records:

*Allograpta javana*; Knutson et al. 1975: 308 (Orient. cat.); Kim, JI 1980: 382 (Korean check.); Peck 1988: 12 (Palaeartic cat.); Ohara 1989: 783 (Japanese check.); ESK & KSAE 1994: 288 (Korean check.).

*Sphaerophoria javana*; Shiraki 1930: 394 (redescr.); Hokuryukan 1965: 216 (redescr.); Okuno 1967: 132 (aphidophagous syrphid list); Kim, CW 1971: 841 (redescr.); Kim, JI 1972: 32 (MS thesis); Kim, JI 1975: 39 (Korean check.); Kim, CH et al. 1991: 107 (Mt. Jiri).

Distribution: Eastern Palaearctic, Oriental, Australian Regions.

#### Genus *Asarkina* Macquart, 1842

TS: *Scaeva rostrata* Wiedemann, 1824.

##### 2. *Asarkina ericetorum formosae* Bezzi 1908: *Annls hist.-nat. Mus. natn. hung.* 6: 499 (*Asarkina*). TL: Takao, Formosa. 타이완납작꽃등에

Korean Records:

*Asarcina formosae*; Kim, CW 1971: 876 (redescr.); Kim, JI 1972: 38 (MS thesis); Kim, JI 1975: 40 (Korean check.); Yoon & Nam 1980: 156 (Mts. Chilgab & Gyeryong); Kim, CW 1980: 261 (distr. map); Kim, CW & Nam 1982c: 173 (Seoul); Kim, CW & Nam 1984: 91 (Mt. Jeombong); Kim, CW et al. 1985: 108 (Mt. Juwang); Park & Cho 1986: 136 (Mts. Baekun, Kipaeg, & Hwangso); Kim, CH et al 1991: 106 (Mt. Jiri).

*Asarkina formosae*; Kim, JI 1980: 379 (Korean check.); Kim, JI & Park 1984: 43 (anatomy); ESK & KSAE 1994: 288 (Korean check.).

Distribution: Sri Lanka, Taiwan, Sumbawa, Korea?

Remarks: Occurrence of this Oriental species in Korea needs to be more carefully confirmed.

##### 3. *Asarkina porcina* (Coquillett, 1898): *Proc. U.S. natn. Mus.*, 21: 322 (*Syrphus*). TL: not given (Japan). 넓적꽃등에

Korean Records:

*Asarcina porcina*; Doi 1938a: 8 (Korean check.); Nagaoka 1942: 96 (Mt. Myohyang); ZSK 1968: 179 (Korean check.); Hyun & Woo 1969: 199 (Mt. Jiri); Kim, CW 1971: 876 (redescr.); Kim, JI 1972: 39 (MS thesis); Kim, JI 1975: 40 (Korean check.); Kim, CW et al. 1976: 110 (Mt. Chiak); Kim, CW 1980: 262 (distr. map); Nam & Kim, ML 1983: 133 (Mt. Jiri); Kim, JI & Chang 1987: 113 (Mt. Taebaek); Kim, CH 1991: 106 (Mt. Jiri).

*Asarkina porcina*; Kim, JI 1980: 379 (Korean check.); Kim, JI 1981: 353 (Sudong-myeon); Kim, JI & Park 1984: 43 (anatomy); Kim, JI et al. 1991: 187 (Mt. Sockri); ESK & KSAE 1994: 288 (Korean check.); Kim, JI 1996: 177 (Mt. Bangtae).

Distribution: East Siberia to Russian Far East, Korea, Japan, Oriental Region.

#### Genus *Betasyrphus* Matsumura, 1917

TS: *Syrphus serarius* Wiedemann, 1830.

#### 4. *Betasyrphus serarius* (Wiedemann, 1830): Aussereurop. zweifl. Insekt., 2: 128 (*Syrphus*).

TL: "China." 검정넓적꽃등에

Korean Records:

*Betasyrphus serarius*; Matsumura & Adachi 1917a: 144 (redescr.); Peck 1988: 13 (Palearctic cat.); Ohara 1989: 783 (Japanese check.); ESK & KSAE 1994: 288 (Korean check.).

*Syrpha serarius*; Kim, CW & Nam 1982c: 172 (Seoul).

*Syrphus serarius*; Shiraki 1930: 360 (redescr.); FESGC 1932: 103 (Gwangneung Forest); Doi 1938a: 10 (Korean check.); Hokuryukan 1956: 1622 (redescr.); Hokuryukan 1965: 216 (redescr.); Okuno 1967: 134 (aphidophagous syrphid list); ZSK 1968: 178 (Korean check.); Kim, JI et al. 1971: 848 (redescr.); Kim, JI 1972: 42 (MS thesis); Kim, CW et al. 1974: 246 (DMZ); Kim, JI 1975: 40 (Korean check.); Kim, JI 1980: 380 (Korean check.); Kim, JI & Park 1984: 42 (anatomy); Kim, JI & Chang 1987: 113 (Mt. Taebaek); Kim, JI & Yoo 1987b: 518 (DMZ vicinities).

Distribution: Russian Far East (Khabarovsk & Primorye Territories, Sakhalin, Kuril Is), Korea, Japan, China, Oriental Region, New Guinea, Australia.

#### Genus *Dasysyrphus* Enderlein, 1938

TS: *Scaeva albostrata* Fallén, 1817.

#### 5. *Dasysyrphus albostratus* (Fallén, 1817): Syrphici Sveciae: 42 (*Scaeva*). TL: "Scania" [= prov. Skåne] (Sweden). 노랑줄꽃등에

*coronatus* (Rondani, 1857): Dipt. Ital. Prodrumus, 2: 143 (*Lasiophthicus*). TL: "ditionis parmensis" [= region of Parma] (Italy).

*confusus* (Egger, 1860): Verh. zool.-bot. Ges. Wien, 10: 664 (*Syrphus*). TL: "Austria".

*carinthiacus* (Latzel, 1876): Jb. naturh. Landes Mus. Kärnten, 22-24:105 (*Syrphus*, as var. of *arcuatus* Fallén). TL: "Kärnten" [= Carinthia] (Austria).

Korean Records:

*Dasysyrphus albostratus*; Han et al. 1998: 10 (Yonsei Wonju Campus).

Distribution: Europe, Russia (excl. northern parts), East Asia (Mongolia, Korea, Japan).

**6. *Dasysyrphus bilineatus* (Matsumura, 1917):** Ent. Mag., Kyoto: 3(1): 38 (*Syrphus* (*Syrphus*)).

TL: "Hokkaido (Sapporo)" (Japan). 두줄꽃등에

*excavatus* (Matsumura, 1918): J. Coll. Agric. Hokkaido imp. Univ., 8(1): 14 (*Catabomba*). TL: "Hokkaido (Sapporo), Honshu (Tokyo)" (Japan).

Korean Records:

*Dasysyrphus bilneatus*; Kim, JI & Chang 1984: 175 (Is. Geomun).

*Dasysyrphus bilineatus*; Kim, JI 1980: 380 (Korean check.); Peck 1988: 14 (Palearctic cat.); Ohara 1989: 783 (Orient. cat.); Kim, JI & Park 1991: 226 (Daechung lake vicinities); ESK & KSAE 1994: 288 (Korean check.); CFNM 1995: 478 (Jeju-do); Han et al. 1998: 10 (Yonsei Wonju Campus).

*Syrphus bilineatus*; Doi 1938a: 10 (Korean check.); ZSK 1968: 180 (Korean check.); Kim, CW & Kim, JI 1971: 168 (Sogeu-gang & Mt. Odae); Kim, CW 1971: 850 (redescrip.); Kim, JI 1972: 39 (MS thesis); Kim, CW et al. 1974: 246 (DMZ); Kim, JI 1975: 40 (Korean check.); Kim, CW 1980: 291 (distr. map); Kim, CW & Nam 1982c: 172 (Seoul); Kim, CW & Nam 1982a: 290 (Seoul).

Distribution: Russian Far East (Khabarovsk & Primorye Territories, Sakhalin, Kuril Is), Korea, Japan, Taiwan.

**7. *Dasysyrphus tricinctus* (Fallén, 1817):** *Syrphici Sveciae*: 41 (*Scaeva*). TL: "Scaniae" and

"Westrogothia" [=prov. Skåne and Västergötland] (Sweden). 두점줄꽃등에

*okunii* (Matsumura, 1918): J. Coll. Agric. Hokkaido imp. Univ., 8: 11 (*Conosyrphus*). TL: "Hokkaido (Sapporo)" (Japan).

Korean Records:

*Syrphus tricinctus*; Park et al. 1993: 208 (Mt. Jiri); Han et al. 1998: 10 (Yonsei Wonju Campus).

Distribution: Palearctic Region.

**Genus *Didea* Macquart, 1834**

TS: *Didea fasciata* Macquart, 1834.

**8. *Didea alneti* (Fallén, 1817):** *Syrphici Sveciae*: 38 (*Scaeva*). TL: "Smolandiae" [=prov. Småland] (Sweden). 멍꽃등에

*pellucidula* (Wiedemann in Meigen, 1822): Syst. Besch., 3: 311 (*Syrphus*). TL: "Oesterreich" (Austria).

*japonica* Matsumura, 1917: Ent. Mag., Kyoto, 2(4): 138, pl. VI, fig.2 (*Didea*). TL: "Saghalien" [=Sakhalin], Honshu (Japan)".

*sachalinensis* Matsumura, 1917: Ent. Mag., Kyoto, 2(4): 138, pl. VI, fig.5 (*Didea*) TL: "Saghalien (Ohtani)" [=Sakhalin: Sokol].

Korean Records:

*Didea alneti*; Doi 1938a: 8 (Korean check.); Ku 1968: 35 (Mt. Myeongji); ZSK 1968: 179 (Korean check.); Kim, CW & Kim, JI 1971: 168 (Sogeu-gang & Mt. Odae); Kim, CW 1971: 847

(redescrip.); Kim, JI 1972: 45 (MS thesis); Kim, CW et al. 1974: 246 (DMZ); Kim, JI 1975: 40 (Korean check.); Kim, CW 1980: 265 (distr. map); Kim, JI 1980: 380 (Korean check.); Kim, JI 1981: 353 (Sudong-myeon); Kim, CW & Nam 1982a: 290 (Seoul); Kim, CW & Nam 1982c: 172 (Seoul); Nam & Kim, ML 1983: 132 (Mt. Jiri); Kim, JI & Yoo 1987b: 518 (near DMZ); Peck 1988: 17 (Palearctic cat.); Yoon et al. 1990: 123 (Mt. Gaya); Kim, CH et al. 1991: 106 (Mt. Jiri); Kim, JI & Park 1991: 226 (Daechung lake vicinities); Park et al. 1993: 208 (Mt. Jiri); ESK & KSAE 1994: 288 (Korean check.); CFNM 1995: 478 (Jeju-do); Kim, JI & Kim, JK 1996: 50 (Mts. Daiam & Dutayeon); Han et al. 1998: 10 (Yonsei Wonju Campus).

*Dideoides alneti*; Kim, JI & Park 1984: 43 (anatomy).

Distribution: Holarctic Region.

9. *Didea fasciata* (Macquart, 1834): Hist. nat. Ins., Dipt., 1: 509 (*Didea*). TL: "environs de Paris" (France). 명월늪적꽃등에  
*foersteri* (Meigen, 1838): Syst. Besch., 7: 140 (*Enica*). TL: not given ("in hiesiger Gegend") (?Stolberg near Aachen) [Germany].

Korean Records:

*Didea fasciata*; Kim, CW 1971: 848 (redescrip.); Kim, JI 1972: 46 (MS thesis); Kim, JI 1975: 40 (Korean check.); Kim, CW 1980: 266 (distr. map); Kim, JI 1980: 380 (Korean check.); Kim, CW & Nam 1982c: 172 (Seoul); Yoon et al. 1990: 123 (Mt. Gaya); Kim, CH et al. 1991: 106 (Mt. Jiri); Park et al. 1993: 208 (Mt. Jiri); ESK & KSAE 1994: 288 (Korean check.); CFNM 1995: 478 (Jeju-do); Han et al. 1998: 10 (Yonsei Wonju Campus).

*Dideoides fasciata*; Kim, JI & Park 1984: 43 (anatomy).

Distribution: Palearctic, Oriental Regions.

### Genus *Dideoides* Brunetti, 1908

TS: *Dideoides ovatus* Brunetti, 1908.

10. *Dideoides coquillettii* (van der Goot, 1964): Beaufortia, 10(127): 218 (*Syrphus*, new name for *Syrphus lautus* Coquillett, 1898, a junior primary homonym of *Syrphus lautus* Giglio-Tos, 1892). 끝노랑꽃등에

*lautus* (Coquillett, 1898): Proc. U.S. natn. Mus., 21: 323 (*Syrphus*). TL: not given (Japan).

Korean Records:

*Dideoides coquillettii*; ESK & KSAE 1994: 288 (Korean check.).

*Dideoides coquillettii*; Peck 1988: 18 (Palearctic cat.); Ohara 1989: 783 (Japanese check.); Kim, JI 1995a: 176 (Mt. Sobaek); Kim, JI 1995b: 145 (Byeonsan Peninsula); Han et al. 1998: 10 (Yonsei Wonju Campus).

*Dideoides lauta*; ZSK 1968: 179 (Korean check.); Kim, CW 1971: 878 (redescrip.); Kim, JI 1972: 44 (MS thesis); Kim, JI 1981: 353 (Sudong-myeon); Park et al. 1993: 208 (Mt. Jiri).

*Dideoides lautus*; Doi 1938a: 8 (Korean check.); Kim, CW & Kim, JI 1972a: 92 (Mujugucheondong); Kim, CW & Kim, JI 1974: 121 (Mt. Naejang); Kim, JI 1975: 40 (Korean check.); Kim, CW et al. 1976: 111 (Mt. Chiak); Kim, CW & Nam 1977: 137 (Mt. Jogye); Kim,

CW 1980: 267 (distr. map); Kim, JI 1980: 380 (Korean check.); Kim, CW & Nam 1982c: 173 (Seoul).

Distribution: Korea, Japan, Oriental Region.

11. *Dideoides latus* (Coquillett, 1898): Proc. U.S. natn. Mus., 21: 323 (*Syrphus*). TL: not given (Japan). 얼룩무늬노랑꽃등에

Korean Records:

*Dideoides lata*; Kim, CW et al. 1971: 57 (Is. Ulreung); Kim, CW 1971: 877 (redescr.); Kim, JI 1972: 43 (MS thesis); Lee & Kwon 1981: 160 (Is. Ulreung & Dog); Kim, CW & Nam 1982c: 173 (Seoul).

*Dideoides latus*; Kim, JI 1975: 40 (Korean check.); Kim, JI 1980: 380 (Korean check.); ESK & KSAE 1994: 288 (Korean check.); CFNM 1995: 478 (Jeju-do); Kim, JI 1995b: 145 (Byeonsan Peninsula); Han et al. 1998: 10 (Yonsei Wonju Campus).

Distribution: Korea, Japan, Oriental Region.

### Genus *Doros* Meigen, 1803

TS: *Syrphus conopseus* Fabricius, 1775.

12. *Doros conopseus* (Fabricius, 1775): Syst. entom.: 768 (*Syrphus*). TL: "Europe".

개미허리꽃등에

*conopeus* Zeller, 1842: Isis (Oken's), 1842: 830; unjustified emendation.

*profuges* (Harris, [1780]): Expos. Eng. Ins.: 81 (*Musca*). TL: "Essex, near West Tilbury" (England).

*coarctatus* (Panzer, [1797]): Faunae insect. germ., Fasc. 45: 22 (*Syrphus*). TL: "Carinthiae montibus" (Austria or Yugoslavia).

*bipunctatus* Mik, 1885: Verh. zool.-bot. Ges. Wien, 35: 328 (*Doros*, as var. of *conopseus*). TL: "Frankreich" (France).

*destillatorius* Mik, 1885: Wien. ent. Ztg, 4: 53 (*Doros*). TL: "Illyria (Goritia)" [=Gorizia] (Italy).

*vespiformis* (Matsumura, 1916): Thousand Ins. Japan, Add. 2: 207, pl. X VII. fig. 20 (*Bacchiopsis*).

TL: "Hokkaido (Sapporo)" (Japan).

Korean Records:

*Doros chopseus*; ZSK 1968: 179 (Korean check.).

*Doros conopseus*; Doi 1938a: 8 (Korean check.); Doi 1938b: 92 (Gaema-plateau); Kim, CW 1971: 843 (redescr.); Kim, JI 1972: 24 (MS thesis); Kim, JI 1975: 39 (Korean check.); Kim, JI 1980: 382 (Korean check.); ESK & KSAE 1994: 288 (Korean check.).

*Doros conopseus*; Kim, JI & Kim, JK 1996: 50 (Mts. Daian & Dutayon).

Distribution: Palearctic Region.

### Genus *Epistrophe* Walker, 1852

TS: *Epistrophe conjungens* Walker, 1852.

13. *Epistrophe grossulariae* (Meigen, 1822): Syst. Besch., 3: 306 (*Syrphus*). TL: not given

(Europe). 대왕꽃등에

*formosa* (Harris, [1780]): Expos. Eng. Ins.: 107 (*Musca*). TL: not given (England). A junior primary homonym of *Musca formosa* Scopoli, 1763.

[*conjungens* Walker, 1852: Ins. Saunders., 1: 242 (*Epistrophe*). TL: "Bolton, United States"].

Korean Records:

*Epistrophe grossulariae*; Kim, CW 1971: 881 (redescrip.); Kim, JI 1972: 28 (MS thesis); Kim, JI 1975: 39 (Korean check.); Kim, JI 1980: 381 (Korean check.); ESK & KSAE 1994: 288 (Korean check.).

Distribution: Holarctic Region.

14. *Epistrophe nigroepistomata* Shiraki et Edashige, 1953: Trans. Shikoku ent. Soc., 3(5-6): 99 (*Epistrophe*). TL: "Omogo Valley, Ehime Pref." (Japan). 검정주둥이꽃등에, 한국곤충명집 (ESK & KSAE 1994)에는 "굵은줄납작꽃등에"로 잘못 기록되어 있음.

Korean Records:

*Epistrophe nigroepistomata*; Kim, JI & Kim, CW 1972: 9 (new Korean record); Kim, JI 1972: 28 (MS thesis); Kim, JI 1975: 39 (Korean check.); Kim, JI 1980: 381 (Korean check.); Kim, CW & Nam 1982c: 173 (Seoul); ESK & KSAE 1994: 288 (Korean check.); CFNM 1995: 478 (Jeju-do).

Distribution: Korea, Japan (Shikoku).

15. *Epistrophe nitidicollis* (Meigen, 1822): Syst. Besch., 3: 308 (*Syrphus*). TL: not given (Europe). 구건꽃등에 (신칭) - 한국에서 이 종을 최초로 기록한 구건 선생의 이름을 따서 명명함.

Korean Records:

*Syrphus nitidicollis*; Ku 1968: 35 (Mt. Myeongji).

Distribution: Holarctic Region.

16. *Epistrophe omogensis* Shiraki et Edashige, 1953: Trans. Shikoku ent. Soc., 3(5-6): 101 (*Epistrophe*). TL: "Mt. Omogo, Ehime Pref." (Japan). 굵은줄납작꽃등에

Korean Records:

*Epistrophe omogensis*; Kim, JI & Kim, CW 1972: 9 (new Korean record); Kim, JI 1975: 39 (Korean check.); Kim, JI 1980: 381 (Korean check.); Kim, CW & Nam 1982b: 130 (Mts. Gyeong, Sogyeong & Gachilbong); CFNM 1995: 478 (Jeju-do).

*Meliscaeva omogensis*; Kim, JI et al. 1993: 153 (Mt. Gyeong); ESK & KSAE 1994: 289 (Korean check.).

Distribution: Korea, Japan (Shikoku).

### Genus *Episyrphus* Matsumura et Adachi, 1917

TS: *Episyrphus fallaciosus* Matsumura, 1917.

17. *Episyrphus balteatus* (de Geer, 1776): Mem. Ins., 6: 116 (*Musca*). TL: not given (Sweden).

호리꽃등에

*scitule* (Harris,[1780]): Expos. Eng. Ins.: 111 (*Musca*). TL: not given (England).

*scitulus* (Harris,[1780]): Expos. Eng. Ins.: 101 (*Musca*). TL: not given (England).

*alternatus* (Schränk, 1781): Enum. ins. austr. indig.: 448 (*Musca*). TL: not given (Austria).

- nectareus* (Fabricius, 1787): Mantissa insect., 2: 341 (*Syrphus*). TL: "Dania".
- pleuralis* (Thomson, 1869): in K. svenska Fregatten Eugenies resa, 2(1): 497 (*Syrphus*). TL: "China".
- andalusiacus* Strobl, 1899: Wien. ent. Ztg, 18(5-6): 145 (*Syrphus*, as forma of *balteatus*). TL: "Algeciras, Iativa" (Spain).
- fallaciosus* Matsumura, 1917: Ent. Mag., Kyoto, 2(4): pl. VI, fig.13; Ent. Mag., Kyoto, 3(1): 18 (*Episyrphus*). TL: "Honshu, Kiushu" (Japan).
- proximus* (Santos Abreu, 1924): Mems R. Acad. Cienc. Artes, Barcolona, (3) 19(1): 40 (*Syrphus*, as var. of *balteatus*). TL: "La Palma" (Canary Is.).
- signatus* (Santos Abreu, 1924): Mems R. Acad. Cienc. Artes, Barcolona, (3) 19(1): 41 (*Syrphus*, as var. of *balteatus*). TL: "La Palma" (Canary Is.).

#### Korean Records:

- Allogranta halteata*; Kim, JI & Kim, JK 1996: 50 (Mts. Daiam & Dutayeon).
- Allograptus balteatus*; Kim, JI 1980: 382 (Korean check.); Kim, JI 1981: 353 (Sudong-myeon); Kim, JI & Park 1984: 43 (anatomy); Kim, JI & Yoo 1987a: 226 (Mujugucheondong); Kim, JI & Yoo 1987b: 518 (DMZ vicinities); Kim, JI et al. 1991: 187 (Mt. Sockri); Kim, JI & Park 1991: 226 (Daechung lake vicinities); Kim, JI et al. 1993: 153 (Mt. Gyeong); Kim, JI et al. 1994: 116 (Mt. Gwangdeok); ESK & KSAE 1994: 288 (Korean check.); Kim, JI 1995a: 176 (Mt. Sobaek); Kim, JI 1995b: 145 (Byeonsan Peninsula); Kim, JI 1996: 177 (Mt. Bangtae).
- Epistrophe balteata*; Kim, CW et al. 1971: 57 (Mt. Ulreung).
- Epistrophe baltata*; Kim, JI 1972: 25 (MS thesis).
- Epistrophe balteata*; Kim, CW & Kim, JI 1971: 168 (Sogeuimgang & Mt. Odae); Kim, CW 1971: 879 (redescr.); Kim, CW & Kim, JI 1972a: 91 (Mujugucheondong); Kim, CW & Kim, JI 1974: 121 (Mt. Naejang); Kim, CW et al. 1974: 245 (DMZ); Kim, JI 1975: 39 (Korean check.); Kim, CW et al. 1976: 110 (Mt. Chiak); Kim, CW & Nam 1977: 137 (Mt. Jogye); Kim, CW & Nam 1978: 138 (Imgye-myon); Kim, JI & Lee 1980: 85 (island Sinan-gun); Kim, CW 1980: 268 (distr. map); Lee & Kwon 1981: 160 (Is. Ulreung & Dog); Kim, JI & Chang 1982a: 151 (Is. Deokjeok); Kim, CW & Nam 1982b: 130 (Mts. Gyeong, Sogyeong & Gachilbong); Nam & Kim, ML 1983: 133 (Mt. Jiri); Kim, JI & Chang 1984: 175 (Is. Geomun); Kim, CW & Nam 1984: 91 (Mt. Jeombong); Kim, CW & Nam 1985: 105 (Mt. Baekun); Kim, CW et al. 1985: 108 (Mt. Juwang); Yoon et al. 1990: 123 (Mt. Gaya); Kim, CH et al. 1991: 106 (Mt. Jiri); Park et al. 1993: 208 (Mt. Jiri).
- Epistrophe fallaciosus*; Kim, CW 1971: 881 (redescr.); Kim, JI 1972: 27 (MS thesis); Kim, CW et al. 1974: 245 (DMZ); Kim, JI 1975: 39 (Korean check.); Kim, CW 1980: 271 (distr. map); Kim, JI 1980: 381 (Korean check.); Kim, CW & Nam 1982a: 290 (Seoul); Kim, JI & Chang 1987: 113 (Mt. Taebaek); Yoon et al. 1990: 123 (Mt. Gaya); Kim, JI et al. 1991: 187 (Mt. Sockri); ESK & KSAE 1994: 288 (Korean check.).
- Episyrphus balteatus*; Matsumura & Adachi 1917b: 16 (redescr.); Kim, JI & Chang 1987: 113 (Mt. Taebaek); CFNM 1995: 478 (Jeju-do); Han et al. 1998: 10 (Yonsei Wonju Campus).
- Eristrophe balteata*; Yoon & Nam 1980: 155 (Mts. Chilgab & Gyeryong); Kim, CW & Nam 1982c: 173 (Seoul); Yoon et al. 1989: 143 (Mt. Weolchul).



*Eristrophe fallacius*; Kim, CW & Nam 1982c: 173 (Seoul).

*Syrphus balteata*; Okada 1941: 262 (Korean record).

*Syrphus balteatus*; ZSK 1968: 180 (Korean check.).

*Syrphus balteatus nectarinus*; Shiraki 1930: 382 (redescr.); FESGC 1932: 114 (Gwangneung Forest).

Distribution: Palaearctic, Oriental, Australian Regions.

**18. *Episyrphus nectarinus* (Wiedemann, 1830):** Aussereurop. zweifl. Insekt., 2: 128 (*Syrphus*).

TL: "China". 꿀납작꽃등에

Korean Records:

*Asarkina nectarinus*; Kim, JI 1980: 379 (Korean check.).

*Episyrphus nectarinus*; Peck 1988: 23 (Palaearctic cat.); Ohara 1989: 784 (Japanese check.); ESK & KSAE 1994: 289 (Korean check.).

Distribution: China, Korea, Japan, Oriental & Australian Regions.

**Genus *Ischyrosyrphus* Bigot, 1882**

TS: *Ischyrosyrphus sivae* Bigot, 1882.

**19. *Ischyrosyrphus glaucius* (Linnaeus, 1758):** Syst. Nat., Ed. 10, 1: 593 (*Musca*). TL:

"Europa". 남색무늬넓적꽃등에

*nobilis* (Meigen, 1822): Syst. Besch., 3: 316 (*Syrphus*). TL: not given (?Stolberg near Aachen [Germany]).

*leucozonus* (Germar, 1825): Fauna Ins. Europ. Fasc. 11: tab. 25 (*Syrphus*). TL: "Germania".

*miyakei* (Matsumura, 1911): J. Coll. Agric. Tohoku imp. Univ. Sapporo, 4(1): 77 (*Chamaesyrphus*, as "*Chaemosyrphus*"). TL: "Korsakoff, Mauka" [=Sakhalin: Korsakov, Kholmisk].

*strandii* Duda, 1940: Folia zool. hydrobiol., 10(1): 222 (*Ischyrosyrphus*). TL: "Ludwigstal (Altwatergeb.)" [=Jesenik, Sudety Mts on border of Poland with Czechoslovakia].

*vernalis* Suster, 1959: Fauna R.P. Romine, Insecta, 9(3): 155 (*Ischyrosyrphus*). TL: "Borsec (Regiunea Autonoma Maghiară)".

Korean Records:

*Ischyrosyrphus glaucius*; Kim, JI & Chang 1982a: 151 (Is. Deokjeok); Kim, CW & Nam 1982b: 130 (Mts. Gyeong, Sogyeong & Gachilbong); Kim, JI et al. 1994: 153 (Mt. Gyeong); Kim, JI 1995a: 176 (Mt. Sobaek); Kim, JI & Kim, JK 1996: 50 (Mts. Daian & Dutayeon).

*Ischyrosyrphus glaucius*; Kim, JI & Park 1991: 226 (Daechung lake vicinities); ESK & KSAE 1994: 288 (Korean check.).

Distribution: Palaearctic Region.

**20. *Ischyrosyrphus laternarius* (Müller, 1776):** Zool. Danicae Prodromus: 174 (*Musca*). TL:

"Dania et Norvegia" (Denmark and Norway). 가로무늬꽃등에

*mutatus* (Zetterstedt, 1849): Dipt. Scand., 8: 3140 (*Scaeva*). TL: "Smolandia ad Skärsjö" [=prov. Småland] (Sweden).

*sachalinensis* (Matsumura, 1918): J. Coll. Agric. Hokkaido imp. Univ., 8(1): 10 (*Karasyrphus*). TL:

"Saghalien (Odoari, Mauka, Motodomari)" [=Sakhalin: Korsakov, Kholmsk, Vostochnyi].

Korean Records:

*Ischyrosyrphus laternarius*; Doi 1938a: 9 (Korean check.); Kim, JI 1972: 35 (MS thesis); Kim, JI 1975: 39 (Korean check.); Kim, CW & Nam 1982b: 130 (Mts. Gyeong, Sogyeong and Gachilbong); Kim, JI et al. 1993: 153 (Mt. Gyeong); ESK & KSAE 1994: 288 (Korean check.).

*Isehisyrphus laternarius*; ZSK 1968: 179 (Korean check.).

*Leucozona laternarius*; Kim, JI 1980: 379 (Korean check.).

*Syrphus laternarius*; Kim, CW 1971: 850 (redescrip.).

Distribution: Palearctic Region.

### Genus *Leucozona* Schiner, 1860

TS: *Musca lucorum* Linnaeus, 1758.

#### 21. *Leucozona lucorum* (Linnaeus, 1758): Syst. Nat., Ed. 10, 1: 592 (*Musca*). TL: "Europe".

끝검정꽃등에

*praecincta* (Scopoli, 1763): Entom. carniolica: 357 (*Conops*). TL: "Austriaco Litorali".

*pellucens* (Harris, [1780]): Expos. Eng. Ins.: 82 (*Musca*). TL: not given (England). A junior primary homonym of *Musca pellucens* Linnaeus, 1758.

*asiliformis* (Fabricius, 1781): Species insect., 2: 426 (*Syrphus*). TL: "Germania".

*nigripila* Mik, 1888: Wien. ent. Ztg, 7: 141 (*Leucozona*, as, var. of *lucorum*). TL: Circassia.

*differens* Frey, 1946: Notul. ent., 25: 158 (*Leucozona*, as, var. of *lucorum*). TL: "Nord-und Ost-Finnland".

Korean Records:

*Leucozona leucorum*; Kim, JI 1980: 379 (Korean check.).

*Leucozona lucorum*; Doi 1938a: 9 (Korean check.); ZSK 1968: 179 (Korean check.); Kim, CW 1971: 844 (redescrip.); Kim, JI 1972: 47 (MS thesis); Kim, JI 1975: 40 (Korean check.); ESK & KSAE 1994: 288 (Korean check.).

Distribution: Holarctic Region.

### Genus *Melangyna* Verrall, 1901

TS: *Melanostoma quadrimaculata* Verrall, 1873.

#### 22. *Melangyna lasiophthalma* (Zetterstedt, 1843): Dipt. Scand., 2: 735 (*Scaeva*). TL: "ad Holmiam" [=Stockholm] (Sweden). 보라무늬꽃등에

*sexguttata* (Meigen, 1835): Faunus (Gistel's), 2: 69 and Syst. Besch., 7(1838): 135 (*Syrphus*). TL: not given ("Umgegend von München") [Gernamy].

*saghalinensis* (Matsumura et Adachi, 1917): Ent. Mag., Kyoto, 3(1): 15 (*Stenosyrphus*, as var. of *lasiophthalmus*). TL: "Saghalien (Shiska, Motodomari)" [=Sakhalin: Poronaysk, Vostochnyi].

*nikkoensis* (Matsumura, 1918): J. Coll. Agric. Hokkaido imp. Univ., 8(1): 12 (*Stenosyrphus*). TL: "Honshu (Nikko)" (Japan).

## Korean Records:

*Melangyna lasiophthalma*; ESK & KSAE 1994: 288 (Korean check.).

*Melangyna lasiophthalmus*; Kim, JI 1980: 379 (Korean check.); CFNM 1995: 479 (Jeju-do).

*Syrphus lasiophthalmus*; Doi 1938a: 10 (Korean check.); ZSK 1968: 180 (Korean check.); Kim, CW & Kim, JI 1971: 168 (Sogeu-gang & Mt. Odae); Kim, CW 1971: 849 (redescrip.); Kim, JI 1972: 41 (MS thesis); Kim, JI 1975: 40 (Korean check.).

Distribution: Palaearctic Region.

Genus *Meliscaeva* Frey, 1946

TS: *Scaeva cinctella* Zetterstedt, 1843.

**23. *Meliscaeva cinctella* (Zetterstedt, 1843):** Dipt. Scand., 2: 742 (*Scaeva*). TL: "Scania;

Ostrogotia ad Lärketorp & Wadstena; Dalhem Calmariae; Gottlandia ad Ruthe, Nähr & Wamblingbo; Lapponia Umensi ad Wilhelmina, Almsele & Frederica; in Norvegia ad Östre Naes Vaerdaliae" (Sweden, Norway). 가는줄납작꽃등에

*unifasciata* (Strobl, 1909): Mitt. naturw. Ver. Steierm., 46: 98 (*Syrphus*, as var. of *cinctellus*). TL: "Krummholzregion des Kalbling" [=near Admont] (Austria).

## Korean Records:

*Epistrophe cinctella*; Kim, CW 1971: 880 (redescrip.); Kim, JI 1972: 27 (MS thesis); Kim, JI 1975: 39 (Korean check.); Kim, JI et al. 1976: 110 (Mt. Chiak); Kim, CW 1980: 270 (distr. map); Kim, JI 1980: 381 (Korean check.); Kim, JI 1981: 353 (Sudong-myeon); Kim, JI & Park 1984: 43 (anatomy); Kim, JI & Chang 1987: 113 (Mt. Taebaek); CFNM 1995: 478 (Jeju-do).

*Meliscaeva cinctella*; ESK & KSAE 1994: 289 (Korean check.); Kim, JI 1995a: 176 (Mt. Sobaek).

Distribution: Holarctic, Oriental Regions.

Genus *Metasyrphus* Matsumura, 1917

TS: *Syrphus corollae* Fabricius, 1794.

**24. *Metasyrphus confrater* (Wiedemann, 1830):** Aussereurop. zweifl. Insekt., 2: 120 (*Syrphus*).

TL: "China". 대만납작꽃등에

## Korean Records:

*Metasyrphus confrater*; Kim, JI 1980: 380 (Korean check.); Kim, JI & Park 1991: 226 (Daechung lake vicinities); ESK & KSAE 1994: 289 (Korean check.); Kim, JI & Kim, JK 1996: 50 (Mts. Daiam & Dutayeon).

*Syrphus confrater*; Kim, JI & Kim, CW 1972: 9 (new Korean record); Kim, JI 1972: 40 (MS thesis); Kim, CW & Kim, JI 1972a: 91 (Mujugucheondong); Kim, CW & Kim, JI 1974: 121 (Mt. Naejang); Kim, JI 1975: 40 (Korean check.).

Distribution: China, Korea, Japan, Oriental Region to New Guinea.

**25. *Metasyrphus corollae* (Fabricius, 1794):** Entom. Syst., 4: 306 (*Syrphus*). TL: "Kilia" [=Kiel]

[Germany]. 별납작꽃등에

- pyrorum* (Schränk, 1803): Fauna boica, 3(1): 114 (*Musca*). TL: not given (Baiern) [=Bavaria] [Germany].
- olitorius* (Fallén, 1817): Syrphici Sveciae: 43 (*Scaeva*). TL: not given (Svecia) (Sweden)
- lacerus* (Meigen, 1822): Syst. Besch., 3: 301 (*Syrphus*). TL: not given ("aus dem Kaiserl. Königl. Museum") (?Austria)
- crenatus* (Macquart, 1829): Mém. Soc. Sci. Agric. Lille, 1827–1828: 243 and Ins. Dipt., 4: 95 (*Syrphus*). TL: "Nord de la France".
- flaviventris* (Macquart, 1829): Mém. Soc. Sci. Agric. Lille, 1827–1828: 240 and Ins. Dipt., 4: 92 (*Syrphus*). TL: "Nord de la France".
- fulvifrons* (Macquart, 1829): Mém. Soc. Sci. Agric. Lille, 1827–1828: 240 and Ins. Dipt., 4: 92 (*Syrphus*). TL: "Nord de la France".
- terminalis* (Wiedemann, 1830): Aussereurop. zweifl. Insekt., 2: 135 (*Syrphus*). TL: "Egypten" (Egypt).
- disjunctus* (Macquart, 1842): Mém. Soc. Sci. Agric. Lille, 1841(1): 148 and Dipt. exot., 2(2): 88 (*Syrphus*). TL: "Alger".
- algius* (Macquart in Lucas, 1849): Explor. scient. Algérie, Zool., 3: 469, pl.4, fig. 11 (*Syrphus*). TL: "environs d'Alger" (Algeria).
- berber* (Bigot, 1884): Annls Soc. ent. Fr., (6) 4: 87 (*Syrphus*). TL: "Maroc" (Morocco).
- pallidus* (Bigot, 1888): Explor. scient. Tunisie, Paris: 6 (*Syrphus*, as var. of *corollae*). TL: "Oued Leben, Djebel Berd" (Algeria, Tunisia).

#### Korean Records:

- Metasyrphus corellae*; Kim, CW 1980: 282 (distr. map).
- Metasyrphus corollae*; Hokuryukan 1956: 1621 (redescrip.); Hokuryukan 1965: 216 (redescrip.); Okuno 1967: 129 (aphidophagous syrphid list); ZSK 1968: 178 (Korean check.); Hyun & Woo 1969: 200 (Mt. Jiri); Kim, CW 1971: 852 (redescrip.); Kim, JI 1972: 36 (MS thesis); Kim, CW & Kim, JI 1972a: 91 (Mujugucheondong); Kim, CW & Kim, JI 1974: 121 (Mt. Naejang); Kim, CW et al. 1974: 246 (DMZ); Kim, JI 1975: 39 (Korean check.); Ito et al. 1977: 253 (redescrip.); Yoon & Nam 1980: 156 (Mts. Chilgab & Gyeryong); Kim, JI 1980: 380 (Korean check.); Kim, JI 1981: 353 (Sudong-myeon); Kim, JI & Park 1984: 43 (anatomy); Kim, JI & Chang 1987: 113 (Mt. Taebaek); Kim, CH et al. 1991: 106 (Mt. Jiri); Kim, JI et al. 1991: 187 (Mt. Sockri); Kim, JI et al. 1994: 116 (Mt. Gwangdeok); ESK & KSAE 1994: 289 (Korean check.); CFNM 1995: 479 (Jeju-do); Kim, JI 1995a: 176 (Mt. Sobaek); Kim, JI 1995b: 145 (Byeonsan Peninsula); Han et al. 1998: 10 (Yonsei Wonju Campus).
- Metasyrphus corollae*; Kim, CW & Nam 1982a: 290 (Seoul); Kim, CW & Nam 1982c: 172 (Seoul); Kim, CW & Nam 1985: 106 (Mt. Baekun).
- Syrphus corollae*; Shiraki 1930: 370 (redescrip.); FESGC 1932: 130 (Gwangneung Forest); Masaki 1936: 258 (faunal report); Doi 1938a: 10 (Korean check.); ZSK 1968: 180 (Korean check.).
- Distribution: Palaearctic, Oriental Regions, Tasmania.
- 26. *Metasyrphus komabensis* Matsumura, 1918:** J. Coll. Agric. Hokkaido imp. Univ., 8(1): 21 (*Metasyrphus*). TL: "Honshu (Tokyo)" (Japan). 육점박이꽃등에

## Korean Records:

*Lasiopeicus komabensis*; Ku 1968: 35 (Mt. Myeongji).

*Lasiotricus komabensis*; Doi 1938a: 9 (Korean check.); ZSK 1968: 179 (Korean check.); Kim, CW 1971: 882 (redescrip.); Kim, JI 1972: 35 (MS thesis); Kim, JI 1975: 39 (Korean check.); Yoon & Nam 1979: 86 (Is. Geoje); Kim, JI 1980: 380 (Korean check.); Kim, CW & Nam 1982c: 173 (Seoul); Kim, JI & Park 1984: 43 (anatomy).

*Metasyrphus komabensis*; ESK & KSAE 1994: 289 (Korean check.); Kim, JI 1996: 178 (Mt. Bangtae).

*Scaeva komabensis*; CFNM 1995: 480 (Jeju-do).

Distribution: Korea, Japan.

- 27. *Metasyrphus luniger* (Meigen, 1822):** Syst. Besch., 3: 300 (*Syrphus*). TL: not given ("aus der Baumhauerischen Sammlung") (Europe). 반월넙적꽃등에  
*nigrifemoratus* (Macquart, 1829): Mém. Soc. Sci. Agric. Lille, 1827-1828: 241 and Ins. Dipt., 4: 93 (*Syrphus*). TL: "Nord de la France".  
*nigrofemoratus*: Meigen, 1838: Syst. Besch., 7: 132 (*Syrphus*): error or emend.  
*bucculatus* (Rondani, 1857): Dipt. Ital. Prodromus, 2: 134 (*Syrphus*). TL: "agri parmensis" [=Parma] (Italy).  
*maricolor* (Enderlein, 1938): Sber. Ges. naturf. Freunde Berl., 1937(4-7): 210 (*Syrphus*, as var. of *luniger*). TL: "Harz" (Germany); "Andalusien" (Spain); "Italien (Triest)" (Italy); "Dalmatien (Ragusa)" [=Dubrovnik] (Yugoslavia).  
*azureus* (Szilády, 1940): Annls hist.-nat. Mus. natn. hung., 33: 63 (*Syrphus*, as var. of *luniger*). TL: "Österreich und Túrkeve (Mittelungarn)" (Austria and Hungary).  
*transcendens* (Szilády, 1940): Annls hist.-nat. Mus. natn. hung., 33: 62 (*Syrphus*, as var. of *luniger*). TL: "Mária-Besnyö" (Hungary).

## Korean Records:

*Metasyrphus luniger*; Kim, JI 1980: 380 (Korean check.); ESK & KSAE 1994: 289 (Korean check.).

*Syrpha lumigar*; Kim, CW & Nam 1982c: 172 (Seoul).

*Syrphus luniger*; Kim, JI & Kim, CW 1972: 10 (new Korean record); Kim, JI 1972: 40 (MS thesis); Kim, JI 1975: 40 (Korean check.); CFNM 1995: 480 (Jeju-do).

Distribution: Holarctic, Oriental Regions.

- 28. *Metasyrphus nitens* (Zetterstedt, 1843):** Dipt. Scand., 2: 712 (*Scaeva*). TL: "in Ostrogothia; ad Lärketorp" (Sweden). 물결넙적꽃등에  
*bisinuatus* (Palma, 1863): Ann. Accad. aspir. Natur. Napoli, (3) 3: 53 (*Syrphus*). TL: "Cancello" [=near Acerra] (Italy).  
*frequens* Matsumura, 1917: Ent. Mag., Kyoto, 2(4): 148, pl. VI, fig. 8 (*Metasyrphus*). TL: "Hokkaido, Honshu, Kiushu" (Japan).  
*abbreviatus* (Kanervo, 1934): Annls Soc.zool.-bot. fenn. "Vanamo", 14(5): 127 (*Syrphus*, as var. of *nitens*). TL: "Südliche Lappland in Sodankylä" (Finland).  
*errans* (Kanervo, 1934): Annls Soc. zool.-bot. fenn. "Vanamo", 14(5): 128 (*Syrphus*, as var. of *nitens*). TL: "Karjalohja im südlichen Finnland".

## Korean Records:

*Metasyrphus frequens*; Kim, JI et al. 1994: 116 (Mt. Gwangdeok); ESK & KSAE 1994: 289 (Korean check.); Kim, JI 1995b: 145 (Byeonsan Peninsula); Kim, JI & Kim, JK 1996: 50 (Mts. Daiam & Dutayeon); Kim, JI 1996: 177 (Mt. Bangtae); Nam 1996: 304 (color photo).

*Metasyrphus frequense*; Kim, JI 1995a: 176 (Mt. Sobaek).

*Metasyrphus nitens*; Hokuryukan 1965: 216 (redescr.); Okuno 1967: 129 (aphidophagous syrphid list); Kim, CW 1971: 852 (redescr.); Kim, CW et al. 1974: 246 (DMZ); Kim, JI 1975: 40 (Korean check.); Kim, CW 1980: 283 (distr. map); Kim, JI 1980: 381 (Korean check.); Kim, JI 1981: 353 (Sudong-myeon); Kim, CW & Nam 1982b: 129 (Mts. Gyeong, Sogyeong & Gachilbong); Kim, CW & Nam 1982c: 172 (Seoul); Nam & Kim, ML 1983: 133 (Mt. Jiri); Kim, CW & Nam 1984: 91 (Mt. Jeombong); Nakane 1984: 13 (color photo); Kim, JI & Park 1984: 43 (anatomy); Kim, CW et al. 1985: 108 (Mt. Juwang); Park & Cho 1986: 136 (Mts. Paegun, Kipaeg, & Hwangso); Kim, JI & Chang 1987: 113 (Mt. Taebaek); Kim, JI & Yoo 1987b: 518 (DMZ vicinities); Peck 1988: 36 (Palearctic cat.); Kim, CH et al. 1991: 106 (Mt. Jiri); Kim, JI et al. 1991: 187 (Mt. Sockri); Kim, JI et al. 1994: 153 (Mt. Gyeong); Park et al. 1993: 208 (Mt. Jiri); CFNM 1995: 479 (Jeju-do); Kim, JI & Kim, JK 1996: 50 (Mts. Daiam & Dutayeon); Han et al. 1998: 10 (Yonsei Wonju Campus).

*Metasyrphus nitense*; Kim, JI 1972: 37 (MS thesis); Kim, CW & Kim, JI 1972a: 91 (Mujugucheon-dong).

*Syrphus nitens*; Shiraki 1930: 365 (redescr.).

Distribution: Palearctic Region.

Genus *Parasyrphus* Matsumura, 1917

TS: *Syrphus aeneostoma* Matsumura, 1917.

**29. *Parasyrphus annulatus* (Zetterstedt, 1838):** Insecta Lapp.: 604 (*Scaeva*). TL: "in lapponia meridionali ad Wilhelmina Lapponiae Umensis (Lapponia Suecica; Gothlandia; Scania)" (Sweden).

좁줄꽃등에

*sinuatus* (Palma, 1863): Ann. Accad. aspir. Natur. Napoli, (3) 3: 51 (*Syrphus*). TL: "Napoli" (Italy).

*zetterstedti* (Verhoff, 1891): Ent. Nachr., 17: 360 (*Syrphus*). TL: "am Südabhang des Venusberges bei Bonn" (Germany).

Korean Records:

*Parasyrphus annulatus*; Han et al. 1998: 10 (Yonsei Wonju Campus).

Distribution: Europe, Russia, East Asia (Mongolia, Korea, Japan).

Genus *Scaeva* Fabricius, 1850

TS: *Musca pyrastris* Linnaeus, 1758.

**30. *Scaeva pyrastris* (Linnaeus, 1758):** Syst. Nat., Ed. 10, 1: 594 (*Musca*). TL: "Svecia"

(Sweden). 닳무늬꽃등에

*rosae* (De Geer, 1776): M m, Ins., 6: 108; unjustified new name for *Musca pyrastris* Linnaeus.

*mellina* (Harris, [1780]): Expos. Eng. Ins.: 80, tab. XXIV, fig. 23 (*Musca*). TL: not given (England). A junior primary homonym of *Musca mellina* Linnaeus, 1758.

*transfuga* (Fabricius, 1794): Entom. syst., 4: 306 (*Syrphus*). TL: "Europe".

*unicolor* Curtis, 1834: Brit. Ent., 8: 509 (*Scaeva*, as var. of *selenitica* Meigen). TL: not given ("the neighbourhood of London") (England).

*flavoscutellata* (Girschner, 1884): Wien. ent. Ztg, 3(7): 197 (*Syrphus* (*Catabomba*), as var. of *pyrastris*). TL: not given (Thüringen) (Germany).

Korean Records:

*Scaeva pyrastris*; Han et al. 1998: 10 (Yonsei Wonju Campus).

Distribution: Holarctic Region.

### Genus *Sphaerophoria* Le Peletier et Serville, 1828

TS: *Musca scripta* Linnaeus, 1758.

**31. *Sphaerophoria bengalensis* Macquart, 1842:** Mém. Soc. Sci. Agric. Lille, 1841 (1): 164 and Dipt. exot., 2(2): 104 (*Sphaerophoria*). TL: "Bengale" (India). 남꽃등에

*flavoabdominalis* Brunetti, 1915: Rec. Indian Mus., 11(3): 214 (*Sphaerophoria*, as from of *bengalensis*). TL: "Baluchistan, Bushire, Katmandu (Nepal), Dharampur (Simla Hills) ...; Agra; Ferozepore (Punjab)".

Korean Records:

*Sphaerophoria bengalensis*; Peck 1988: 42 (Palaeartic cat.); Ohara 1989: 785 (Japanese check.); ESK & KSAE 1994: 289 (Korean check.); CFNM 1995: 480 (Jeju-do).

Distribution: Iran, China, Korea, Japan, Oriental Region.

**32. *Sphaerophoria chongjini* Bańkowska, 1964:** Annls zool., Warsz., 22(15): 347 (*Sphaerophoria*). TL: "Korea, Onpho bei Tschöngtschin". 청진꽃등에

Korean Records:

*Sphaerophoria chongjini*; Bańkowska 1964: 347 (orig. desc TL: Korea, Onpho bei Tschongtschin); Kim, JI 1980: 381 (Korean check.); Peck 1988: 42 (Palaeartic cat.); ESK & KSAE 1994: 289 (Korean check.).

Distribution: From Netherlands & Russia to Korea.

**33. *Sphaerophoria contigua* Macquart, 1847:** Mém. Soc. Sci. Agric. Lille, 1846: 78 and Dipt. exot., suppl. 2: 62 (*Sphaerophoria*). TL: "Philadelphie" (USA). 애꽃등에  
*diminuta* (Matsumura, 1916): Ent. Mag., Kyoto, 2(1): 27 (*Melithreptus*). TL: "Honshu (Kyoto)" (Japan).

*hirayamae* (Matsumura, 1916): Ent. Mag., Kyoto, 2(1): 25 (*Melithreptus*). TL: "Honshu (Tokyo)" (Japan).

*kumamotensis* (Matsumura, 1916): Ent. Mag., Kyoto, 2(1): 26 (*Melithreptus*). TL: "Honshu and Kiushu" (Japan).

*shibatensis* (Matsumura, 1916): Ent. Mag., Kyoto, 2(1): 26 (*Melithreptus*). TL: "Honshu (Shibata in

the Prov. Echigo)" (Japan).

*takasagensis* (Matsumura, 1916): Ent. Mag., Kyoto, 2(1): 24 (*Melithreptus*). TL: "Hokkaido (Sapporo), Honshu (Takasago)" (Japan).

*cylindricus* Say, 1824: 11 (preoccupied Fabricius, 1781) (*Syrphus*).

*fulvicauda* Bigot, 1884: 104 (*Sphaerophoria*).

#### Korean Records:

*Allograpta balteata*; Nam 1996: 303 (color photo: misidentification).

*Sphaegina cylindrica*; Kim, JI & Kim, JK 1996: 50 (Mts. Daiam & Dutayeon).

*Sphaerophoria contigua*; Han et al. 1998: 10 (Yonsei Wonju Campus).

*Sphaerophoria cylindrica*; Shiraki 1930: 395 (redescr.); Matsumura 1931: 350 (redescr.); Hokuryukan 1932: 115 (redescr.); Hokuryukan 1956: 1624 (redescr.); Hokuryukan 1965: 216 (redescr.); Okuno 1967: 131 (aphidophagous syrphid list); ZSK 1968: 180 (Korean check.); Kim, CW 1971: 840 (redescr.); Kim, JI 1972: 29 (MS thesis); Kim, CW & Kim, JI 1974: 121 (Mt. Naejang); Kim, JI 1975: 39 (Korean check.); Kim, CW et al. 1976: 110 (Mt. Chiak); Kim, CW & Nam 1978: 138 (Imgye-myon); Kim, JI & Lee 1980: 85 (island Sinan-gun); Yoon & Nam 1980: 155 (Mts. Chilgab & Gyeryong); Kim, CW 1980: 290 (distr. map); Kim, JI 1980: 381 (Korean check.); Lee & Kwon 1981: 160 (Is. Ulreung & Dog); Kim, CW & Nam 1982a: 290 (Seoul); Kim, CW & Nam 1982b: 129 (Mts. Gyebang, Sogyebang & Gachilbong); Kim, JI & Chang 1982b: 176 (Is. Soan); Kim, CW & Nam 1982c: 172 (Seoul); Nam & Kim, ML 1983: 133 (Mt. Jiri); Kim, JI & Chang 1984: 175 (Is. Geomun); Kim, CW & Nam 1985: 105 (Mt. Baekun); Kim, CW et al. 1985: 108 (Mt. Juwang); Kim, JI & Chang 1987: 113 (Mt. Taebaek); Choo 1987: 118 (collected from plum blossom); Ra et al. 1987: 210 (Is. Heuksan); Kim, JI & Yoo 1987a: 226 (Mujugucheondong); Kim, JI & Yoo 1987b: 518 (DMZ vicinities); Kim, CH et al. 1991: 106 (Mt. Jiri); Kim, JI et al. 1991: 187 (Mt. Sockri); Kim, JI & Park 1991: 226 (Daechung lake vicinities); Kim, JI et al. 1994: 153 (Mt. Gyebang); Park et al. 1993: 208 (Mt. Jiri); Kim, JI et al. 1994: 116 (Mt. Gwangdeok); ESK & KSAE 1994: 289 (Korean check.); Kim, JI 1995b: 145 (Byeonsan Peninsula).

Distribution: Korea, Japan, Nearctic Region.

#### 34. *Sphaerophoria indiana* Bigot, 1884: Annls Soc. ent. Fr., (6) 4: 99 (*Sphaerophoria*). TL:

"Indes" (India). 인도꽃등에

[*nigritarsis* Brunetti, 1915: Rec. Indian Mus., 11(3): 216 (*Sphaerophoria*, as from of *indiana*). TL:

"Kurseong, Kodiala, Simla Distr." (India).] "Honshu (Kyoto)" (Japan).

#### Korean Records:

*Sphaerophoria indiana*; Peck 1988: 42 (Palaeartic cat.); Ohara 1989: 785 (Japanese check.); ESK & KSAE 1994: 289 (Korean check.).

Distribution: Eastern Palaearctic to Oriental Regions.

#### 35. *Sphaerophoria macrogaster* (Thomson, 1869): K. svenska Fregatten Eugenies resa, Zool., 2(1): 501 (*Syrphus*). TL: "Sidney" (Australia). 대풍꽃등에

*koreana* Bańkowska, 1964: Annls zool., Warsz., 22(15): 339 (*Sphaerophoria*). TL: "Korea, Dephun ad Kujang".

#### Korean Records:



*Sphaerophoria macrogaster*; Kim, JI 1972: 30 (MS thesis); Kim, JI 1975: 39 (Korean check.); Knutson et al. 1975: 318 (Orient. cat.); Kim, JI 1980: 381 (Korean check.); Peck 1988: 43 (Palaeartic cat.); Ohara 1989: 785 (Japanese check.); ESK & KSAE 1994: 289 (Korean check.).

Distribution: Eastern Palaearctic to Oriental Region, New Guinea, Australia, New Caledonia.

**36. *Sphaerophoria menthastri* (Linnaeus, 1758):** Syst. Nat., Ed. 10, 1: 592 (*Musca*). TL:

“Svecia” (Sweden). 꼬마꽃등에

*melissae* (Meigen, 1822): Syst. Besch., 3: 326 (*Syrphus*). TL: “Stolberg nr. Aachen, Germany” (lectotype des. Vockeroth, 1971: 1632).

*picta* (Meigen, 1822): Syst. Besch., 3: 326 (*Syrphus*). TL: not given (Europe).

*hieroglyphica* (Meigen, 1822): Syst. Besch., 3: 327 (*Syrphus*). TL: “Österreich” (Austria).

Korean Records:

*Sphaerophoria manthastri*; Kim, CW & Kim, JI 1974: 121 (Mt. Naejang).

*Sphaerophoria menthasri*; Kim, CW et al. 1976: 110 (Mt. Chiak).

*Sphaerophoria menthastri*; FESGC 1932: 114 (Gwangneung Forest); Hokuryukan 1932: 115 (redescr.); Masaki 1934: 403 (Ulreung-do); Masaki 1936: 258 (faunal report); Doi 1938a: 9 (Korean check.); ZSK 1968: 180 (Korean check.); Kim, CW et al. 1971: 57 (Is. Ulreung); Kim, CW & Kim, JI 1971: 168 (Sogeuimgang & Mt. Odae); Kim, CW 1971: 842 (redescr.); Kim, CW & Kim, JI 1972a: 91 (Mujugucheondong); Kim, JI 1972: 30 (MS thesis); Kim, CW et al. 1974: 246 (DMZ); Kim, JI 1975: 39 (Korean check.); Kim, JI & Lee 1980: 85 (islandSinan-gun); Kim, JI 1980: 381 (Korean check.); Kim, JI 1981: 353 (Sudong-myeon); Lee & Kwon 1981: 160 (Is. Ulreung & Dog); Kim, JI & Chang 1982a: 151 (Is. Deokjeok); Kim, JI & Chang 1982b: 175 (Is. Soan); Nam & Kim, ML 1983: 133 (Mt. Jiri); Kim, JI & Park 1984: 43 (anatomy); Kim, JI & Chang 1984: 175 (Is. Geomun); Park & Cho 1986: 136 (Mts. Paegun, Kipaeg, & Hwangsok); Kim, JI & Chang 1987: 113 (Mt. Taebaek); Kim, JI & Yoo 1987b: 518 (DMZ vicinities); Peck 1988: 43 (Palaeartic cat.); Kim, JI & Lee 1989: 180 (Is. Anma); Kim, CH et al. 1991: 107 (Mt. Jiri); Kim, JI et al. 1991: 187 (Mt. Sockri); Park et al. 1993: 208 (Mt. Jiri); ESK & KSAE 1994: 289 (Korean check.); CFNM 1995: 480 (Jeju-do); Kim, JI 1995a: 176 (Mt. Sobaek); Kim, JI 1995b: 145 (Byeonsan Peninsula).

Distribution: Palaearctic Region.

**37. *Sphaerophoria rueppelli* (Wiedemann, 1830):** Aussereurop. zweifl. Insekt., 2: 141

(*Syrphus*). TL: “Nubien”; “Abyssinia” (lectotype des. Vockeroth, 1971: 1633). 루펠꽃등에 (신칭) *incerta* (Wiedemann, 1830): Aussereurop. zweifl. Insekt., 2: 143 (*Syrphus*). TL: “Nubien”.

*calceolata* Macquart, 1842: Mém. Soc. Sci. Agric. Lille, 1841(1): 164 and Dipt. exot., 2(2): 104 (*Sphaerophoria*). TL: “Egypt” (lectotype des. Vockeroth, 1971: 1629).

*flavicauda* Zetterstedt, 1843: Dipt. Scand., 2: 771 (*Sphaerophoria*). TL: “in Ostrogothia...; ad Wadstena” (Sweden).

*nitidicollis* Zetterstedt, 1849: Dipt. Scand., 8: 3156 (*Sphaerophoria*). TL: “in Scandinavia meridionali; in arenosis Daniae; in Svecia...; in Scania ad Esperöd et Limhamn” (Sweden, Denmark).

*oleandri* Rondani, 1857: Dipt. Ital. Prodromus, 2: 114 (*Sphaerophoria*). TL: “Melita” [=Malta].

*serpilli* Rondani, 1857: Dipt. Ital. Prodromus, 2: 116 (*Sphaerophoria*). TL: "Parmae" [=Parma] (Italy).

Korean Records:

*Sphaerophoria rueppelli*; Peck 1988: 44 (Palearctic cat.).

Distribution: Palearctic Region.

- 38. *Sphaerophoria taeniata* (Meigen, 1822):** Syst. Besch., 3: 325 (*Syrphus*). TL: "Stolberg nr. Aachen, Germany" (lectotype des. Vockeroth, 1971: 1634). 긴애꽃등에  
*suzukii* (Matsumura, 1916): Ent. Mag., Kyoto, (2) 1: 21, pl. 1, fig. 15 (*Melithreptus*). TL: "Honshu (Kyoto)".  
*kuwayamae* (Matsumura, 1918): J. Coll. Agric. Hokkaido imp. Univ., 8(1): 3 (*Melithreptus*). TL: "Hokkaido (Hakodate)" (Japan).  
*harimensis* (Matsumura, 1918): J. Coll. Agric. Hokkaido imp. Univ., 8(1): 4 (*Melithreptus*). TL: "Honshu (Harima)" (Japan).

Korean Records:

*Sphaerophoria taencta*; ZSK 1968: 180 (Korean check.).

*Sphaerophoria taeniata*; Kim, CW 1971: 842 (redescrip.); Kim, JI 1980: 381 (Korean check.); ESK & KSAE 1994: 289 (Korean check.).

Distribution: Palearctic Region, Canary Is.

### Genus *Syrphus* Fabricius, 1775

TS: *Musca ribesii* Linnaeus, 1758.

- 39. *Syrphus ribesii* (Linnaeus, 1758):** Syst. Nat., Ed. 10, 1: 593 (*Musca*). TL: "Svecia". (Sweden). 좁넓적꽃등에  
*vacuus* (Scopoli, 1763): Entom. Carniolica: 346 (*Musca*). TL: "Carniolia" (?Yugoslavia).  
*blandus* (Harris, [1780]): Expos. Eng. Ins.: 106 (*Musca*). TL: not given (England).  
*tetragonus* (Geoffroy in Fourcroy, 1785): Entom. parisiensis, 2: 484 (*Musca*). TL: "Paris".  
*japonicus* Matsumura, 1917: Ent. Mag., Kyoto, 2(4): pl. VI, fig. 18 (*Syrphus* (*Syrphus*)); Ent. Mag., Kyoto, 3(1): 31 (*Syrphus*). TL: "Hokkaido (Sapporo), Honshu (Nikko)" (Japan). A junior primary homonym of *Syrphus japonicus* Loew, 1858.  
*jezoensis* Matsumura, 1917: Ent. Mag., Kyoto, 3(1): 32 (*Syrphus* (*Syrphus*)). TL: "Hokkaido (Sapporo)" (Japan).  
*kotoriensis* Matsumura, 1917: Ent. Mag., Kyoto, 3(1): 36 (*Syrphus* (*Syrphus*)). TL: "Saghalien (Kotori)" (Sakhalin).  
*moiwanus* Matsumura, 1917: Ent. Mag., Kyoto, 3(1): 33 (*Syrphus* (*Syrphus*)). TL: "Hokkaido (Mt. Moiwa near Sapporo)" (Japan).  
*tsukisappensis* Matsumura, 1917: Ent. Mag., Kyoto, 3(1): 33 (*Syrphus* (*Syrphus*)). TL: "Hokkaido (Sapporo and Tsukisapp near Sapporo)" (Japan).  
*yamahanensis* Matsumura, 1917: Ent. Mag., Kyoto, 3(1): 34 (*Syrphus* (*Syrphus*)). TL: "Hokkaido (Yamahama near Sapporo)" (Japan).

*kuccharerensis* Matsumura, 1918: J. Coll. Agric. Hokkaido imp. Univ., 8(1): 29 (*Syrphus* (*Syrphus*)).

TL: "Hokkaido (Kushiro; ... at the lake-region of Kuccharo)" (Japan).

*maculifer* Matsumura, 1918: J. Coll. Agric. Hokkaido imp. Univ., 8(1): 29 (*Syrphus* (*Syrphus*)). TL:

"Hokkaido (Sapporo)" (Japan).

*okadensis* Matsumura, 1918: J. Coll. Agric. Hokkaido imp. Univ., 8(1): 27 (*Syrphus* (*Syrphus*)). TL:

"Hokkaido (Sapporo), at Okada Park" (Japan).

*tenuis* Matsumura, 1918: J. Coll. Agric. Hokkaido imp. Univ., 8(1): 26 (*Syrphus* (*Syrphus*)). TL:

"Hokkaido (Sapporo)" (Japan).

*tashikaganus* Matsumura, 1918: J. Coll. Agric. Hokkaido imp. Univ., 8(1): 29 (*Syrphus* (*Syrphus*)).

TL: "Hokkaido (Kushiro)" (Japan).

*velox* Matsumura, 1918: J. Coll. Agric. Hokkaido imp. Univ., 8(1): 25 (*Syrphus* (*Syrphus*)). TL:

"Hokkaido (Sapporo)" (Japan).

*interruptus* Ringdahl, 1930: Ent. Tidskr., 51: 173 (*Syrphus*, as var. of *ribesii*). TL: "Island".

*brevicinctus* Kanervo, 1938: Annls ent. fenn., 4(3): 155 (*Syrphus*). TL: "Fl. Lena med., Nikolskaja" (Russia: East Siberia).

*nigrigena* Enderlein, 1938: Sber. Ges. naturf. Freunde, Berl., 1937(4-7): 209 (*Syrphus*, as var. of *ribesii*). TL: "Schweden", "Rumänien (Banat, Orsova)", "Riesengebirge (Flinsberg)" [=Swieradów-Zdrój] (Poland), "Lapland (Qvikkjokk)" [=Kvikkjokk] (Finland), "Sibirien" (Russia). A junior primary homonym of *S. nigrigena* Matsumura, 1917.

*beringi* Virolovitsh, 1975: Taksonomiya i ekologiya zhivotnykh Sibiri (Novye I maloizvestnye vidy fauny Sibiri, 9): 78 (*Syrphus*). TL: Magadan region, issue of Kegali (Russia).

#### Korean Records:

*Syrphus ribesii*; Doi 1938a: 10 (Korean check.); Doi 1938b: 92 (Gaema-plateau); Hyun & Woo 1969: 200 (Mt. Jiri); Kim, CW et al. 1971: 57 (Is. Ulreung); Kim, CW & Kim, JI 1971: 168 (Sogeu-mgang & Mt. Odae); Kim, CW 1971: 851 (redescrip.); Kim, JI 1972: 41 (MS thesis); Kim, CW & Kim, JI 1972a: 91 (Mujugucheondong); Kim, CW et al. 1974: 246 (DMZ); Kim, JI 1975: 40 (Korean check.); Kim, JI 1980: 380 (Korean check.); Lee & Kwon 1981: 160 (Is. Ulreung & Dog); Kim, JI 1981: 353 (Sudong-myeon); Kim, JI & Park 1984: 43 (anatomy); ESK & KSAE 1994: 289 (Korean check.); Kim, JI et al. 1994: 116 (Mt. Gwangdeok); Han et al. 1998: 10 (Yonsei Wonju Campus).

*Syrphus ribesii*; ZSK 1968: 180 (Korean check.).

*Syrphus ribesii*; Kim, CH et al. 1991: 107 (Mt. Jiri).

#### Distribution: Holarctic Region.

40. *Syrphus torvus* (Osten Sacken, 1875): Proc. Boston Soc. nat. Hist., 18: 139 (*Syrphus*). TL: "in the subalpine region of Mt. Washington". "White Mountains", "Massachusetts, Rhode Island, Canada, the Rocky Mountains in Colorado" (North America). 털쭈름적꽃등에

*conspicuus* Matsumura, 1918: J. Coll. Agric. Hokkaido imp. Univ., 8(1): 28 (*Syrphus* (*Syrphus*)).

TL: "Hokkaido (Sapporo)" (Japan).

#### Korean Records:

*Syrphus torvus*; Kim, CW 1971: 851 (redescrip.); Kim, JI 1972: 43 (MS thesis); Kim, CW & Kim, JI

1972a: 92 (Mujugucheondong); Kim, CW et al. 1974: 246 (DMZ); Kim, JI 1975: 40 (Korean check.); Kim, CW et al. 1976: 111 (Mt. Chiak); Kim, JI 1980: 380 (Korean check.); ESK & KSAE 1994: 289 (Korean check.); Kim, JI 1995a: 176 (Mt. Sobaek); Han et al. 1998: 10 (Yonsei Wonju Campus).

Distribution: Holarctic, Oriental Regions.

**41. *Syrphus vitripennis* Meigen, 1822:** Syst. Besch., 3: 308 (*Syrphus*). TL: not given (Europe).

노랑벌꿀늪적꽃등에

*topiarius* Meigen, 1822: Syst. Besch., 3: 305 (*Syrphus*). TL: "Österreich" (Austria).

*confinis* (Zetterstedt, 1838): Insecta Lapp: 602 (*Scaeva*). TL: "in Lapponia meridionale; ad Lycksele ... et alterum in Alpe Brattiks-fjell... (Lapponia)" (Sweden).

*akakurensis* Matsumura, 1917: Ent. Mag., Kyoto, 3(1): 35 (*Syrphus* (*Syrphus*)). TL: "Honshu (Akakura in the Prov. Echigo)" (Japan).

*chujenjianus* Matsumura, 1917: Ent. Mag., Kyoto, 3(1): 35 (*Syrphus* (*Syrphus*)). TL: "Hokkaido (Chitose), Honshu (Chuzenji near Nikko)" (Japan).

*campestris* Matsumura, 1918: J. Coll. Agric. Hokkaido imp. Univ., 8(1): 30 (*Syrphus* (*Syrphus*)). TL: "Hokkaido (Sapporo)" (Japan).

*candidus* (Matsumura, 1918): J. Coll. Agric. Hokkaido imp. Univ., 8(1): 17 (*Metasyrphus*). TL: "Hokkaido (Sapporo)" (Japan).

*dubius* Matsumura, 1918: J. Coll. Agric. Hokkaido imp. Univ., 8(1): 28 (*Syrphus* (*Syrphus*)). TL: "Hokkaido (Sapporo) at Nakajima Park" (Japan).

*kitakawae* Matsumura, 1918: J. Coll. Agric. Hokkaido imp. Univ., 8(1): 25 (*Syrphus* (*Syrphus*)). TL: "Hokkaido (Sapporo)" (Japan).

*kushirensis* Matsumura, 1918: J. Coll. Agric. Hokkaido imp. Univ., 8(1): 30 (*Syrphus* (*Syrphus*)). TL: "Hokkaido (Kushiro); ... at the lake-region of Kuccharo" (Japan).

*palliventralis* Matsumura, 1918: J. Coll. Agric. Hokkaido imp. Univ., 8(1): 26 (*Syrphus* (*Syrphus*)). TL: "Hokkaido (Sapporo)" (Japan).

*shibechensis* Matsumura, 1918: J. Coll. Agric. Hokkaido imp. Univ., 8(1): 31 (*Syrphus* (*Syrphus*)). TL: "Hokkaido (Kushiro); ... on the road from Shibecha to Teshikaga" (Japan).

Korean Records:

*Syrphus vitripennis*; Kim, JI & Yoo 1987b: 518 (DMZ vicinities); ESK & KSAE 1994: 289 (Korean check.).

Distribution: Holarctic, Oriental Regions.

**Genus *Xanthogramma* Schiner, 1860**

TS: *Syrphus ornatus* Meigen, 1822.

**42. *Xanthogramma coreanum* Shiraki, 1930:** Mem. Fac. Agric. Taihoku imp. Univ., 1(1): 403 (*Xanthogramma*). TL: "Korea (Koryo, Shakuoji)". 참꽃등에

Korean Records:

*Xanthogramma coreanum*; Shiraki 1930: 403 (orig. desc TL: Korea (Koryo, Shakuoji)); FESGC

1932: 107 (Gwangneung Forest); Hokuryukan 1932: 115 (redescrip.); Doi 1938a: 11 (Korean check.); ZSK 1968: 180 (Korean check.); Kim, CW 1971: 843 (redescrip.); Kim, JI 1972: 46 (MS thesis); Kim, JI 1975: 40 (Korean check.); Kim, JI 1980: 380 (Korean check.); Peck 1988: 51 (Palearctic cat.); ESK & KSAE 1994: 289 (Korean check.).

Distribution: Russian Far East (Primorye Territory) to Korea.

### Tribe Bacchini 알락꽃등에족

#### Genus *Allobaccha* Curran, 1928

TS: *Baccha rubella* van der Wulp, 1898.

#### 43. *Allobaccha apicalis* (Loew, 1858): Wien. ent. Machr., 2: 106 (as "*Bacha*"). TL: not given ("Japan"). 끝검정알락꽃등에

Korean Records:

*Allobaccha apicalis*; ESK & KSAE 1994: 289 (Korean check.); CFNM 1995: 477 (Jeju-do); Kim, JI 1995a: 176 (Mt. Sobaek); Kim, JI 1995b: 145 (Pyonsan Peninsula); Han et al. 1998: 10 (Yonsei Wonju Campus).

*Baccha apicalis*; Kim, CW 1971: 838 (redescrip.); Kim, JI 1972: 23 (MS thesis); Kim, CW & Kim, JI 1974: 121 (Mt. Naejang); Kim, JI 1975: 39 (Korean check.); Kim, JI 1980: 382 (Korean check.); Kim, JI & Chang 1984: 174 (Is. Geomun).

Distribution: Russian Far East (Primorye Territory), Korea, Japan, Oriental Region.

#### Genus *Baccha* Fabricius, 1805

TS: *Syrphus elongatus* Fabricius, 1775.

#### 44. *Baccha maculata* Walker, 1852: Ins. Saunders., Dipt., 1: 223 (*Baccha*). TL: "East Indies" 알락꽃등에

Korean Records:

*Baccha maculata*; Shiraki 1930: 417 (redescrip.); FESGC 1932: 108 (Gwangneung Forest); Hokuryukan 1932: 114 (redescrip.); Hokuryukan 1956: 1626 (redescrip.); Hokuryukan 1965: 214 (redescrip.); Okuno 1967: 126 (aphidophagous syrphid list); ZSK 1968: 178 (Korean check.); Kim, CW 1971: 838 (redescrip.); Kim, JI 1972: 23 (MS thesis); Kim, CW & Kim, JI 1974: 121 (Mt. Naejang); Kim, JI 1975: 39 (Korean check.); Knutson et al. 1975: 323 (Orient. cat.); Kim, CW et al. 1976: 110 (Mt. Chiak); Kim, CW & Nam 1978: 138 (Imgye-myon); Yoon & Nam 1980: 155 (Mts. Chigab & Gyeryong); Kim, CW 1980: 263 (distr. map); Kim, JI 1980: 382 (Korean check.); Kim, JI 1981: 353 (Sudong-myeon); Kim, CW & Nam 1982c: 172 (Seoul); Nam & Kim, ML 1983: 133 (Mt. Jiri); Kim, JI & Park 1984: 43 (anatomy); Kim, JI & Yoo 1987b: 518 (DMZ vicinities); Peck 1988: 55 (Palearctic cat.); Ohara 1989: 786 (Orient. cat.); Yoon et al. 1990: 123 (Mt. Gaya); Kim, CH et al. 1991: 106 (Mt. Jiri); Kim, JI et al. 1991: 187 (Mt. Sockri); Park et al. 1993: 208 (Mt. Jiri); ESK & KSAE 1994: 289 (Korean check.); CFNM 1995: 477 (Jeju-do); Kim,

JI 1996: 178 (Mt. Bangtae); Han et al. 1998: 10 (Yonsei Wonju Campus).

Distribution: Russian Far East (Sakhalin, Primorye Territory), Korea, Japan, Oriental Region.

**Tribe Chrysotoxini** 수염치레꽃등에족

**Genus *Chrysotoxum* Meigen, 1803**

TS: *Musca bicincta* Linnaeus, 1758.

- 45. *Chrysotoxum coreanum* Shiraki, 1930:** Mem. Fac. Agric. Taihoku imp. Univ., 1(1): 32 (*Chrysotoxum*). TL: "Korea (Shakuoji)". 한국수염치레꽃등에

Korean Records:

*Chryrototum coreanum*; Ku 1968: 35 (Mt. Myeongji).

*Chrysotoxum coreanum*; Shiraki 1930: 32 (orig. desc TL: Korea (Shakuoji)); FESGC 1932: 58 (Gwangneung Forest); Doi 1938a: 8 (Korean check.); ZSK 1968: 179 (Korean check.); Kim, CW 1971: 854 (redescr.); Kim, JI 1972: 52 (MS thesis); Kim, JI 1975: 40 (Korean check.); Kim, JI 1980: 382 (Korean check.); Peck 1988: 58 (Palaeartic cat.); ESK & KSAE 1994: 289 (Korean check.).

Distribution: Russian Far East (Primorye Territory) to Korea.

- 46. *Chrysotoxum festivum* (Linnaeus, 1758):** Syst. Nat., Ed. 10, 1: 593 (*Musca*). TL: "Europa". 수염치레꽃등에

*bipunctatum* (Müller, 1776): Zool. Danicae Prodrum: 174 (*Musca*). TL: "Daniae et Norvegiae" (Denmark and Norway).

*imbelle* (Harris, [1776]): Expos. Eng. Ins.: 60, tab. X V, fig. 16 (*Musca*). TL: not given (England).

*geographicum* (Geoffroy in Fourcroy, 1785): Entom. parisiensis, 2: 478 (*Musca*). TL: "Paris".

*annulatum* Loew, 1840: Öffentl. Prüf. Schüler K. Friedrich-Wilhelms-Gymnasiums zu Posen, 1840: 26 and Isis (Oken's), 1840 (VII-VIII): 558 (*Chrysotoxum*, as var. of *arcuatum* Linnaeus). TL: not given (Posen) [=Poznań] (Poland).

*infuscatum* Loew, 1840: Öffentl. Prüf. Schüler K. Friedrich-Wilhelms-Gymnasiums zu Posen, 1840: 26 and Isis (Oken's), 1840 (VII-VIII): 558 (*Chrysotoxum*, as var. of *arcuatum* Linnaeus). TL: not given (Posen) [=Poznań] (Poland).

*scutellare* Loew, 1840: Öffentl. Prüf. Schüler K. Friedrich-Wilhelms-Gymnasiums zu Posen, 1840: 26 and Isis (Oken's), 1840 (VII-VIII): 558 (*Chrysotoxum*, as var. of *festivum*). TL: not given ("Grossherzogthum Posen") [=Poznań].

*tomentosum* Giglio-Tos, 1890: Atti Accad. Sci., Torino, 26: 159 (*Chrysotoxum*, as var. of *festivum*). TL: "regioni alpine del Piemonte" (Italy).

*japonicum* Matsumura, 1916: Thousand Ins. Japan, Add. 2: 253, pl. X III, fig. 28 and Ent. Mag., Kyoto, 2(1): 6, pl. I, fig. 1 (*Chrysotoxum*). TL: "Honshu (Nikko, Kyoto)" (Japan).

Korean Records:

*Chrysotoxum festivum*; Shiraki 1930: 31 (redescr.); Hokuryukan 1956: 1628 (redescr.); ZSK 1968: 179 (Korean check.); Kim, CW 1971: 855 (redescr.); Kim, JI 1972: 52 (MS thesis); Kim,

CW & Kim, JI 1972a: 92 (Mujugucheondong); Kim, CW et al. 1974: 246 (DMZ); Kim, JI 1975: 40 (Korean check.); Yoon & Nam 1980: 156 (Mts. Chigab & Gyeryong); Kim, JI 1980: 382 (Korean check.); Lee & Kwon 1981: 160 (Is. Ulreung & Dog); Kim, JI & Yoo 1987b: 518 (DMZ vicinities); Park et al. 1993: 208 (Mt. Jiri); ESK & KSAE 1994: 289 (Korean check.); CFNM 1995: 478 (Jeju-do); Kim, JI & Kim, JK 1996: 50 (Mts. Daiam & Dutayeon); Han et al. 1998: 10 (Yonsei Wonju Campus).

*Chrysotoxum festivum*; Kim, CH et al. 1991: 106 (Mt. Jiri).

Distribution: Palaearctic, Oriental Regions.

47. *Chrysotoxum grande* Matsumura, 1911: J. Coll. Sapporo, 4(1): 72 (*Chrysotoxum*). TL:

"Chibesani" [=Sakhalin: Ozerskiy]. 큰수염치레꽃등에

Korean Records:

*Chrysotoxum grande*; Shiraki 1930: 31 (redescr.); Doi 1938a: 8 (Korean check.); Doi 1939: 42 (Is. Deokjeok); ZSK 1968: 179 (Korean check.); Kim, CW 1971: 855 (redescr.); Kim, JI 1972: 53 (MS thesis); Kim, JI 1975: 40 (Korean check.); Kim, JI 1980: 382 (Korean check.); Peck 1988: 59 (Palaearctic cat.); Ohara 1989: 786 (Japanese check.); ESK & KSAE 1994: 290 (Korean check.).

Distribution: Russian Far East (Primorye Territory, Sakhalin, Kuril Is), Korea, Japan.

48. *Chrysotoxum sapporensis* Matsumura, 1916: Ent. Mag., Kyoto, 2(1): pl. I, fig. 3

(*Chrysotoxum*). TL: "Hokkaido (Sapporo)" (Japan). 삿포로수염치레꽃등에

*carinatum* Matsumura, 1916: Ent. Mag., Kyoto, 2(1): 8 (*Chrysotoxum*). TL: "Hokkaido (Sapporo)" (Japan).

Korean Records:

*Chrysotoxum sapporensis*; Kim, JI 1975: 40 (Korean check.); Kim, JI 1980: 382 (Korean check.).  
*Chrysotoxum sapporensis*; Doi 1937: 62 (Is. Deokjeok); Doi 1938a: 8 (Korean check.); Doi 1938b: 92 (Gaema-plateau); Doi 1939: 40 (Is. Deokjeok); ZSK 1968: 179 (Korean check.); Kim, CW 1971: 853 (redescr.); Kim, JI 1972: 54 (MS thesis); ESK & KSAE 1994: 290 (Korean check.).

Distribution: Russian Far East (Primorye Territory), Korea, Japan.

49. *Chrysotoxum shirakii* Matsumura, 1931: 6000 illustr. Ins. Jap. Emp.: 334, fig. 17

(*Chrysotoxum*. new name for *Ch. japonicum* Shiraki, a junior primary homonym of *Chrysotoxum japonicum* Matsumura, 1916). 일본수염치레꽃등에

*japonicum* Shiraki, 1930: Mem. Fac. Agric. Taihoku imp. Univ., 1(1): 35 (*Chrysotoxum*). TL: "Japan (Sapporo) und Korea (Kasan)".

Korean Records:

*Chrysotoxum japonicum*; Kim, CH et al. 1991: 106 (Mt. Jiri); Park et al. 1993: 208 (Mt. Jiri).  
*Chrysotoxum japonicum*; Okamoto 1924: 154 (Jeju-do); Shiraki 1930: 35 (orig. desc TL: Japan (Sapporo und Korea (Kasan))); Hokuryukan 1956: 1628 (redescr.); Hokuryukan 1965: 209 (redescr.); Okuno 1967: 126 (aphidophagous syrphid list); Seok 1970: 23 (Jeju-do); Kim, CW 1971: 853 (redescr.); Kim, JI 1972: 53 (MS thesis); Kim, CW & Kim, JI 1972a: 92 (Mujugucheondong); Kim, CW et al. 1974: 246 (DMZ); Kim, JI 1975: 40 (Korean check.); Kim, CW et al. 1976: 111 (Mt. Chiak); Kim, CW & Nam 1977: 137 (Mt. Jogye); Kim, CW 1980: 264

(distr. map); Kim, JI 1980: 382 (Korean check.); Kim, JI 1981: 353 (Sudong-myeon); Kim, JI & Park 1984: 43 (anatomy); Kim, JI & Yoo 1987b: 518 (DMZ vicinities); Kim, JI & Kim, JK 1996: 50 (Mts. Daiam & Dutayeon).

*Chrysotoxum shirakii*; Cho 1963: 230 (Jeju-do); ZSK 1968: 179 (Korean check.); Kim, CW et al. 1971: 57 (Is. Ulreung); Kim, JI 1972: 54 (MS thesis); Peck 1988: 62 (Palearctic cat.); Ohara 1989: 786 (Japanese check.); ESK & KSAE 1994: 290 (Korean check.); CFNM 1995: 478 (Jeju-do); Nam 1996: 305 (color photo); Han et al. 1998: 10 (Yonsei Wonju Campus).

Distribution: Siberia, Russian Far East (Primorye Territory), Korea, Japan.

**50. *Chrysotoxum sibiricum* Loew, 1856:** Verh. zool.-bot. Ver. Wien, 6: 611 (*Chrysotoxum*).

TL: "Sibirien" (Siberia, Russia). 시베리아수염치레꽃등에 (신칭)

Korean Records:

*Chrysotoxum sibiricum*; Peck 1988: 62 (Palearctic cat.).

Distribution: Siberia, Russian Far East, Mongolia, North China, Korea.

**Tribe Melanostomatini 광꽃등에족**

**Genus *Melanostoma* Schiner, 1860**

TS: *Musca mellina* Linnaeus, 1758.

**51. ?*Melanostoma incisum* Matsumura, 1916:** Thousand Ins. Japan, Add. 2: 194, pl. XVI, fig. 10 (*Melanostoma*). TL: "Honshu (Tokyo and Nikko)". 배두눈꽃등에

Korean Records:

*Melanostoma incisum*; Doi 1938a: 9 (Korean check.); ZSK 1968: 180 (Korean check.); Kim, CW 1971: 839 (redescr.); Kim, JI 1972: 33 (MS thesis); Kim, JI 1975: 39 (Korean check.); Kim, JI 1980: 379 (Korean check.); ESK & KSAE 1994: 290 (Korean check.).

*Melanostoma incisum*; Kim, JI & Kim, JK 1996: 50 (Mts. Daiam & Dutayeon).

Distribution: Japan, Korea?

Remarks: Peck (1988) listed this as a doubtful species of *Melanostoma*, and Japanese Check List (Ohara 1988) also indicated "?" for this species. Since the identity of this species in its type locality has not been confirmed yet, the above Korean records are highly questionable.

**52. *Melanostoma mellinum* Linnaeus, 1758:** Syst. Nat., Ed. 10, 1: 593 (*Musca*). TL: "Svecia" (Sweden). 광불이꽃등에

*facultas* (Harris, [1780]): Expos. Eng. Ins.: 109 (*Musca*). TL: not given (England).

*mellarium* (Meigen, 1822): Syst. Besch., 3: 328 (*Syrphus*). TL: not given ("Auf Wiesen und in Wäldern nicht selten") (?Stolerg near Aachen) [Germany].

*melliturgum* Meigen, 1822: Syst. Besch., 3: 329 (*Syrphus*). TL: not given (?Stolerg near Aachen) [Germany].

*minutum* (Macquart, 1829): Mém. Soc. Sci. Agric. Lille, 1827-1828: 234 and Ins. Dipt., 4: 86 (*Syrphus*). TL: "Nord de la France".

*unicolor* (Macquart, 1829): Mém. Soc. Sci. Agric. Lille, 1827-1828: 236 and Ins. Dipt., 4: 88



(*Syrphus*). TL: "Nord de la France".

*laevigatum* (Meigen, 1822): Syst. Besch., 7: 134 (*Syrphus*). TL: not given ("Hiesige Gegend") (?Stolerg near Aachen) [Germany].

*concolor* (Walker, 1851): Ins. Brit., Dipt., 1: 296 (*Syrphus*). TL: not given ("In the collection of the Entomological Club. (E.)") (England).

*nigricorne* Strobl, 1893: Mitt. naturw. Ver. Steierm., 29: 172 (*Melanostoma*, as var. of *mellinum*). TL: "Pitzweide bei Admont, Hohentauern, Scheiplalm des Bösenstein, Mariahof, Almsee bei Turrach" (Austria).

*inornatum* Matsumura, 1919: Ent. Mag., Kyoto, 3(3-4): 132 (*Melanostoma*). TL: "Hokkaido (Sapporo)" (Japan).

*interruptum* Matsumura, 1919: Ent. Mag., Kyoto, 3(3-4): 138 (*Melanostoma*). TL: "Hokkaido (Sapporo), Honshu (Iwate)" (Japan).

*ochiaianum* Matsumura, 1919: Ent. Mag., Kyoto, 3(3-4): 136 (*Melanostoma*). TL: "Saghalien (Ochiai)" (Sakhalin).

*ogasawarae* Matsumura, 1919: Ent. Mag., Kyoto, 3(3-4): 137 (*Melanostoma*). TL: "Honshu (Iwate)" (Japan).

*sachalinense* Matsumura, 1919: Ent. Mag., Kyoto, 3(3-4): 139 (*Melanostoma*). TL: "Saghalien (Toyohara)" [=Sakhalin: YuzhnoSakhalinsk].

*angustatoides* Kanervo, 1934: Annls Soc. zool.-bot. fenn. "Vanamo", 14(5): 123 (*Melanostoma*, as var. of *mellinum*). TL: "in Sodankyläim südlichen Lappland" (Finland).

*melanatum* Kanervo, 1934: Annls Soc. zool.-bot. fenn. "Vanamo", 14(5): 124 (*Melanostoma*, as var. of *mellinum*). TL: "Haukilampi" [=Murmansk region] (Russia).

*obscuripes* Kanervo, 1934: Annls Soc. zool.-bot. fenn. "Vanamo", 14(5): 123 (*Melanostoma*, as var. of *mellinum*). TL: "Parkkino" [=near Pechenga, Murmansk region].

*deficiens* Szilády, 1940: Annls hist.-nat. Mus. natn. hung., 33: 59 (*Melanostoma*, as ab. of *mellinum*). TL: "mitteleuropäischen Hochgebirgen: Radnaer Gebirge (Ungarn) und Tirol" (Roumania, Austria).

*dilatatum* Szilády, 1940: Annls hist.-nat. Mus. natn. hung., 33: 59 (*Melanostoma*, as ab. of *mellinum*). TL: "Fuzine, Kroatien" (Yugoslavia).

#### Korean Records:

*Melanostoma mellinum*; Kim, CW & Nam 1982b: 129 (Mts. Gyeong, Sogyeong & Gachilbong); Kim, JI et al. 1994: 153 (Mt. Gyeong); ESK & KSAE 1994: 290 (Korean check.); CFNM 1995: 479 (Jeju-do); Kim, JI 1996: 178 (Mt. Bangtae).

#### Distribution: Holarctic Region.

### 53. *Melanostoma scalare* (Fabricius, 1794): Entom. syst., 4: 308 (*Syrphus*). TL: "Kiliae"

[=Kiel] [Germany]. 광꽃등에

*gracile* (Meigen, 1822): Syst. Besch., 3: 328 (*Syrphus*). TL: not given (?Stolerg near Aachen) [Germany].

*maculosum* (Meigen, 1822): Syst. Besch., 3: 330 (*Syrphus*). TL: "England".

#### Korean Records:

*Melanostoma scalare*; Doi 1938a: 9 (Korean check.); Kim, CW & Kim, JI 1971: 168 (Sogeuimgang & Mt. Odae); Kim, CW 1971: 840 (redescr.); Kim, JI 1972: 33 (MS thesis); Kim, CW & Kim, JI 1972a: 91 (Mujugucheondong); Kim, CW et al. 1974: 246 (DMZ); Kim, JI 1975: 39 (Korean check.); Kim, CW et al. 1976: 110 (Mt. Chiak); Kim, CW & Nam 1978: 138 (Imgye-myong); Yoon & Nam 1980: 155 (Mt. Chilgab & Gyeryong); Kim, CW 1980: 281 (distr. map); Lee & Kwon 1981: 160 (Is. Ulreung & Dog); Kim, JI 1981: 353 (Sudong-myeon); Kim, CW & Nam 1982b: 130 (Mts. Gyeong, Sogyeong & Gachilbong); Kim, CW & Nam 1982c: 172 (Seoul); Kim, JI & Park 1984: 43 (anatomy); Kim, CW et al. 1985: 108 (Mt. Juwang); Kim, JI & Chang 1987: 113 (Mt. Taebaek); Kim, JI & Yoo 1987a: 226 (Mujugucheondong); Kim, JI & Yoo 1987b: 518 (DMZ vicinities); Kim, CH et al. 1991: 106 (Mt. Jiri); Kim, JI & Park 1991: 226 (Daechung lake vicinities); Kim, JI et al. 1994: 153 (Mt. Gyeong); ESK & KSAE 1994: 290 (Korean check.); CFNM 1995: 479 (Jeju-do); Kim, JI & Kim, JK 1996: 50 (Mts. Daam & Dutayon); ZSK 1968: 180 (Korean check.); Kim, JI 1980: 379 (Korean check.); Kim, CW & Nam 1982a: 290 (Seoul); Kim, CW & Nam 1985: 106 (Mt. Baekun).

Distribution: Palaearctic, Afrotropical, Oriental Regions.

#### Genus *Xanthandrus* Verrall, 1901

TS: *Musca comtus* Harris, [1780].

- 54. *Xanthandrus comtus* (Harris, [1780]):** Expos. Eng. Ins.: 108 (*Musca*). TL: not given (England). 녁점박이꽃등애  
*hyalinatus* (Fallén, 1817): Syrphici Sveciae: 43 (*Scaeva*). TL: not given (Sweden).  
*quadriguttulus* (Matsumura, 1911): J. Coll. Agric. Sapporo, 4(1): 78 (*Syrphus*). TL: "Galkinowraskoe" [=Sakhalin: Dolinsk].  
*reductus* (Čepelák, 1940): Čas. čsl. Spol. ent., 37(1): 34 (*Epistrophe*). TL: "Inovec bei Trenčín" [=near Trenčín] (Czechoslovakia).  
*undulatus* (Čepelák, 1940): Čas. čsl. Spol. ent., 37(1): 34 (*Epistrophe*). TL: "Inovec u Trenčína" [=near Trenčín] (Czechoslovakia).

Korean Records:

*Xanthandrus comtus*; Kim, JI & Kim, CW 1972: 9 (new Korean record); Kim, JI 1975: 40 (Korean check.); Kim, JI 1980: 379 (Korean check.); Kim, JI & Chang 1987: 113 (Mt. Taebaek); Peck 1988: 68 (Palaearctic cat.); ESK & KSAE 1994: 289 (Korean check.); Han et al. 1998: 10 (Yonsei Wonju Campus).

Distribution: Palaearctic, Oriental Regions.

#### Genus *Platycheirus* Le Peletier et Serville, 1828

TS: *Syrphus scutatus* Meigen, 1822.

- 55. *Platycheirus ambiguus* (Fallén, 1817):** Syrphici Sveviae: 47 (*Scaeva*). TL: "Westrogothia" [=prov. Västergötland] (Sweden). 곱슬뺨적꽃등애

*monochaetus* (Loew, 1871): Beschr. europ. Dipt., 2: 224 (*Syrphus*). TL: "Dalmatien" (Yugoslavia).

Korean Records:

*Melanostoma ambiguum*; Kim, CW 1971: 839 (redescrip.); Kim, JI 1972: 33 (MS thesis); Kim, CW et al. 1974: 246 (DMZ); Kim, JI 1975: 39 (Korean check.).

*Platycheirus ambiguus*; ESK & KSAE 1994: 290 (Korean check.); CFNM 1995: 480 (Jeju-do); Kim, JI 1996: 178 (Mt. Bangtae).

*Platycheirus ambiguum*; Kim, JI 1980: 379 (Korean check.).

Distribution: Holarctic, Oriental Regions.

### Tribe Paragini 고려꽃등에족

#### Genus *Paragus* Latreille, 1804

TS: *Syrphus bicolor* Fabricius, 1794.

**56. *Paragus haemorrhous* (Meigen, 1822):** Syst. Beschr., 3: 182 (*Paragus*). TL: "Österreich" (Austria); "südliches Frankreich" (France). 고려꽃등에

*sigillatus* Curtis, 1836: Brit. Ent., 8: 593 (*Paragus*). TL: "Darent" (Great Britain).

*trianguliferus* Zetterstedt, 1838: Insecta Lapp.: 618 (*Paragus*). TL: "in Lapponia meridionali; ad hovaculum Umenaes, Lapponiae Umensis (Lappon.-Gottland. Scania)" (Sweden).

*pallipes* Matsumura, 1916: Ent. Mag., Kyoto, 2(1): 11, pl. 1, fig. 6 (*Paragus*). TL: "Saghalien, Honshu (Towada, Tokyo, Kyoto)" (Russia, Japan).

*coreanus* Shiraki, 1930: Mem. Fac. Agric. Taihoku imp. Univ., 1(1): 250 (*Paragus*). TL: "Korea-Koryo, Kongo, Shakuoji".

Korean Records:

*Paragus coreanus*; Shiraki 1930: 250 (orig. desc TL: Korea-Koryo, Kongo, Shakuoji); FESGC 1932: 90 (Gwangneung Forest); Hokuryukan 1932: 115 (redescrip.); ZSK 1968: 180 (Korean check.); Kim, CW 1971: 836 (redescrip.); Kim, JI 1972: 48 (MS thesis); Kim, JI 1975: 40 (Korean check.); Kim, JI 1980: 378 (Korean check.); ESK & KSAE 1994: 289 (Korean check.).

*Paragus haemorrhous*; Peck 1988: 78 (Palearctic cat.).

Distribution: Palearctic, Afrotropical Regions.

**57. *Paragus jozanus* Matsumura, 1916:** Ent. Mag., Kyoto, 2(1): 10, pl. 1, fig. 5 (*Paragus*). TL: "Hokkaido (Jozankei near Sapporo)" (Japan). 조잔꽃등에

Korean Records:

*Paragus jozanus*; Kim, CW 1971: 836 (redescrip.); Kim, JI 1972: 48 (MS thesis); Kim, JI 1975: 40 (Korean check.); Kim, JI 1980: 378 (Korean check.); Lee & Kwon 1981: 159 (Is. Ulreung & Dog); Peck 1988: 78 (Palearctic cat.); Yoon et al. 1990: 123 (Mt. Gaya); ESK & KSAE 1994: 289 (Korean check.).

Distribution: Korea, Japan.

**58. *Paragus politus* Wiedemann, 1830:** Aussereurop. zweifl. Insekt., 2: 89 (*Paragus*). TL: "China". 광택꽃등에

## Korean Records:

*Paragus polistus*; Kim, JI 1972: 49 (MS thesis); Kim, JI 1980: 378 (Korean check.).

*Paragus politus*; Kim, CW 1971: 836 (redescr.); Kim, JI 1975: 40 (Korean check.); Kim, CW et al. 1976: 111 (Mt. Chiak); Kim, CW 1980: 286 (distr. map); Lee & Kwon 1981: 160 (Is. Ulreung & Dog); ESK & KSAE 1994: 289 (Korean check.); CFNM 1995: 480 (Jeju-do).

Distribution: China, Korea, Japan, Oriental Region.

- 59. *Paragus tibialis* (Fallén, 1817):** Syrphici Sveciae: 60 (*Pipiza*). TL: "in Vestrogothia...; in arvis montosis Scaniae" [=prov. Västergötland and prov. Skåne] (Sweden). 종아리꽃등에  
*aeneus* Meigen, 1822: Syst. Besch., 3: 183 (*Paragus*). TL: "südliches Frankreich" (France).  
*femoratus* Meigen, 1822: Syst. Besch., 3: 184 (*Paragus*). TL: "Österreich" (Austria).  
*obscurus* Meigen, 1822: Syst. Besch., 3: 183 (*Paragus*). TL: "Frankreich" (France).  
*zonatus* Meigen, 1822: Syst. Besch., 3: 177 (*Paragus*). TL: "Herzogthum Berg" [Germany].  
*analisis* (Macquart in Webb and Berthelot, 1839): Hist. nat. Canaries, Entom., 2(2): 109 (*Ascia*). TL: "Iles Canaries".  
*nigritus* Gimmerthal, 1842: Bull. Soc. nat. Moscou, 15: 668 (*Paragus*). TL: "Lief-und Kurland" [=Estonian and Latvian SSR].  
*dispar* Schummel, 1843: Uebers. schles. Ges. vaterl., Kult. 1842: 163 (*Paragus*). TL: "bei Lissa" [=near Wroclaw] (Poland).  
*numida* Macquart in Lucas (ed.), 1849: Explor. scient. Algerie, Zool., 3: 471 (*Paragus*). TL: "environs d'Alger et du cercle de Lacalle" (Algeria).  
*varipes* (Bigot, 1880): Annls Soc. ent. Fr., (5) 10: 150 and Annls Soc. ent. Fr., (6) 5(1885): 249 (*Orthonevra*). TL: "au nord de la Perse et sur le versant méridional du Caucase".  
*ogasawarae* Matsumura, 1916: Ent. Mag., Kyoto, 2(1): 13, pl. 1, fig. 8 (*Paragus*). TL: "Honshu (Iwate)" (Japan).  
*lamagawanus* Matsumura, 1916: Ent. Mag., Kyoto, 2(1): 9 (*Paragus*). TL: "Honshu (Tamagawa)" (Japan).  
*meridionalis* Becker, 1921: Mitt. zool. Mus. Berl., 10: 4 (*Paragus*, as var. of *tibialis*). TL: "Griechenland, Nord-Africa, Sarepta, Turkestan, Teneriffa, Schlesien" (Greece; North Africa; Russia: Krasnoarmeysk, Turkestan; Canary Is, Poland).  
*mogolicus* Kanervo, 1938: Annls ent. fenn., 4(3): 149 (*Paragus*, as var. of *tibialis*). TL: "Daurien" [=Transbaikali] (Russia).

## Korean Records:

*Paragus tibialis*; Shiraki 1930: 247 (redescr.); Matsumura 1931: 348 (redescr.); Hokuryukan 1932: 114 (redescr.); Hokuryukan 1965: 217 (redescr.); Okuno 1967: 130 (aphidophagous syrphid list); ZSK 1968: 178 (Korean check.); Seok 1970: 24 (Jeju-do); Kim, CW et al. 1971: 56 (Ulreung); Kim, CW 1971: 837 (redescr.); Kim, JI 1972: 50 (MS thesis); Kim, CW & Kim, JI 1972a: 92 (Mujugucheondong); Kim, CW & Kim, JI 1974: 121 (Mt. Naejang); Kim, JI 1975: 40 (Korean check.); Yoon & Nam 1980: 155 (Mts. Chilgab & Gyeong); Kim, CW 1980: 288 (distr. map); Kim, JI 1980: 379 (Korean check.); Lee & Kwon 1981: 160 (Is. Ulreung & Dog); Kim, JI 1981: 353 (Sudong-myeon); Kim, JI & Chang 1982a: 151 (Is. Deokjeok); Kim, JI & Chang

1982b: 175 (Is. Soan); Kim, CW & Nam 1982c: 172 (Seoul); Kim, JI & Park 1984: 43 (anatomy); Kim, JI & Yoo 1987b: 518 (DMZ vicinities); Peck 1988: 78 (Palearctic cat.); Kim, JI & Park 1991: 226 (Daechung lake vicinities); Kim, JI et al. 1994: 116 (Mt. Gwangdeok); ESK & KSAE 1994: 289 (Korean check.); CFNM 1995: 480 (Jeju-do); Kim, JI 1996: 178 (Mt. Bangtae); Kim, CW & Nam 1982a: 290 (Seoul).

Distribution: Holarctic, Oriental Regions.

60. *Paragus fasciatus* Coquillett, 1898: Proc. U.S. natn. Mus., 21: 320 (*Paragus*). TL: not given (Japan). 무늬넓적꽃등에

Korean Records:

*Paragus fasciatus*; Kim, CW 1971: 835 (redescr.); Kim, JI 1972: 48 (MS thesis); Kim, JI 1975: 40 (Korean check.); Kim, CW 1980: 285 (distr. map); Kim, JI 1980: 378 (Korean check.); Lee & Kwon 1981: 160 (Is. Ulreung & Dog); Kim, CW & Nam 1982c: 172 (Seoul); Kim, JI & Chang 1987: 113 (Mt. Taebaek); Kim, JI et al. 1991: 187 (Mt. Sockri); ESK & KSAE 1994: 289 (Korean check.); Kim, JI 1995a: 176 (Mt. Sobaek).

Distribution: Russian Far East (Primorye Territory), Korean, Japan (Honshu, Shikoku, Kyushu).

61. *Paragus quadrfasciatus* Meigen, 1822: Syst. Besch., 3: 181 (*Paragus*). TL: "Frankreich" (France). 네줄박이좁꽃등에

*concinus* (Wiedemann in Meigen, 1822): Syst. Besch., 3: 321 (*Syrphus*). TL: "Neapel" [=Naples] (Italy).

*albifrons* (Wiedemann in Meigen, 1822): Syst. Besch., 3: 322 (*Syrphus*, in synonymy with *I. concinnus*). In *paragus* a junior secondary homonym of *Pipiza albifrons* Fallén, 1817.

*bifasciatus* Macquart, 1834: Hist. nat. Ins., Distr., 1: 566 (*Paragus*). TL: "Bordeaux" (France).

*pulcherrimus* Strobl, 1893: Wien. ent. Ztg, 12: 78 (*Paragus*). TL: "Fiume, Abbazia" [Pijeka and Opatija] (Yugoslavia).

*variofasciatus* Becker, 1907: Z. syst. Hymenopt. Dipterol., 7: 249 (*Paragus*). TL: "Biskra" (Algeria).

*nohirae* Matsumura, 1916: Ent. Mag., Kyoto, 2(1): 12, pl. 1, fig. 7 (*Paragus*). TL: "Honshu (Kurama in Kyoto)" (Japan).

Korean Records:

*Paragus quadrfasciatus*; ZSK 1968: 178 (Korean check.).

*Paragus quadrfasciatus*; Shiraki 1930: 246 (redescr.); Matsumura 1931: 348 (redescr.); FESGC 1932: 90 (Gwangneung Forest); Hukuryukan 1956: 1614 (redescr.); Hukuryukan 1965: 217 (redescr.); Okuno 1967: 130 (aphidophagous syrphid list); Kim, CW et al. 1971: 57 (Is. Ulreung); Kim, JI 1972: 49 (MS thesis); Kim, JI 1975: 40 (Korean check.); Kim, CW & Nam 1978: 138 (Imgye-myon); Yoon & Nam 1980: 155 (Mts. Chilgab & Gyeryong); Kim, CW 1980: 287 (distr. map); Kim, JI 1980: 379 (Korean check.); Lee & Kwon 1981: 160 (Is. Ulreung & Dog); Kim, JI 1981: 353 (Sudong-myeon); Kim, JI & Chang 1982a: 151 (Is. Deokjeok); Kim, JI & Park 1984: 43 (anatomy); Kim, JI & Chang 1987: 113 (Mt. Taebaek); Kim, JI & Yoo 1987b: 518 (DMZ vicinities); Peck 1988: 82 (Palearctic cat.); Kim, JI et al. 1991: 187 (Mt. Sockri); ESK & KSAE 1994: 289 (Korean check.); CFNM 1995: 480 (Jeju-do).

*Paragus quadrfasciatus*; Kim, CW 1971: 837 (redescr.); Kim, CW & Nam 1982c: 172 (Seoul).

Distribution: Palaearctic Region.

## Subfamily Milesiinae 알락긴 꽃등에아과

### Tribe Pipizini 좀꽃등에족

#### Genus *Pipiza* Fallén, 1810

TS: *Musca noctiluca* Linnaeus, 1758.

- 62. *Pipiza abdominalis* (Shiraki et Edashige, 1953):** Trans. Shikoku ent. Soc., 3(5-6): 84 (*Pipizella*). TL: "Omogo Valley, Iyo, Ehime Prefecture" (Japan). 배점박이꽃등에

Korean Records:

*Pipiza abdominalis*; Kim, JI et al. 1983: 204 (new Korean record); Peck 1988: 86 (Palaearctic cat.); Ohara 1989: 787 (Japanese check.); ESK & KSAE 1994: 290 (Korean check.).

Distribution: Korea, Japan (Shikoku).

- 63. *Pipiza austriaca* Meigen, 1822:** Syst. Besch., 3: 246 (*Pipiza*). TL: not given (Europe). 오스트리아꽃등에

Korean Records:

*Pipiza austriaca*; Kim, CW 1971: 859 (redescr.); Kim, JI 1972: 13 (MS thesis); Kim, CW et al. 1974: 245 (DMZ); Kim, JI 1975: 39 (Korean check.); Kim, CW 1980: 289 (distr. map); Han et al. 1998: 10 (Yonsei Wonju Campus).

*Pipiza gustniace*; Kim, CW & Nam 1982c: 172 (Seoul).

Distribution: Palaearctic Region.

- 64. *Pipiza flavimaculata* Matsumura, 1918:** J. Coll. Agric. Hokkaido imp. Univ., 8(1): 2 (*Pipiza*). TL: "Honshu (Iwate)" (Japan). 점꽃등에

Korean Records:

*Pipiza flavimaculata*; Kim, JI & Kim, CW 1972: 8 (new Korean record); Kim, JI 1972: 14 (MS thesis); Kim, JI 1975: 39 (Korean check.); Kim, CW & Nam 1982c: 173 (Seoul).

*Pipiza flavomaculata*; Kim, JI 1980: 383 (Korean check.); ESK & KSAE 1994: 290 (Korean check.).

Distribution: Korea, Japan (Honshu).

- 65. *Pipiza inornata* Matsumura, 1916:** Ent. Mag., Kyoto, 2(1): 15, pl. 1, fig. 10 (*Pipiza*). TL: "Hokkaido (Moiwa in Sapporo)". 검정점꽃등에

Korean Records:

*Pipiza inornata*; Kim, JI & Kim, CW 1972: 8 (new Korean record); Kim, JI 1972: 14 (MS thesis); Kim, JI 1975: 39 (Korean check.); Kim, JI 1980: 383 (Korean check.); Kim, JI 1981: 353 (Sudong-myeon); Kim, CW & Nam 1982c: 173 (Seoul); Kim, JI & Park 1984: 43 (anatomy); Kim, JI & Yoo 1987b: 518 (DMZ vicinities); Kim, JI & Park 1991: 226 (Daechung lake vicinities); ESK & KSAE 1994: 290 (Korean check.).

Distribution: Korea, Japan (Hokkaido).

66. *Pipiza signata* Meigen, 1822: Syst. Besch., 3: 246 (*Pipiza*). TL: not given (Europe).

좀검정꽃등에

*Pipiza signata*; Han et al. 1998: 10 (Yonsei Wonju Campus).

Distribution: Europe, Russia, East Asia (Korea, Japan), Oriental Region (Taiwan).

#### Genus *Pipizella* Rondani, 1856

TS: *Mulio virens* Fabricius, 1805.

67. *Pipizella biglumis* (Matsumura, 1916): Ent. Mag., Kyoto, 2(1): 14, pl. 1, fig. 9 (*Pipiza*). TL:

"Honshu (Tamba), Kiushu (Moji)" (Japan). 두흰점꽃등에 (신청)

Korean Records:

*Heringia biglumis*; Kim, JI & Park 1984: 43 (anatomy).

Distribution: Korea, Japan (Honshu, Kyushu).

#### Genus *Stenopipiza* Matsumura, 1919

TS: *Stenopipiza bipunctata* Matsumura, 1919.

68. *Stenopipiza bipunctata* Matsumura, 1919: Ent. Mag., Kyoto, 3(3-4): 141 (*Stenopipiza*).

TL: "Hokkaido (Sapporo)". 배줄꽃등에

Korean Records:

*Stenopipiza bipunctata*; ZSK 1968: 180 (Korean check.).

*Stenopipiza bipunctata*; Doi 1938a: 10 (Korean check.); Kim, CW 1971: 845 (redescr.); Kim, JI 1972: 51 (MS thesis); Kim, JI 1975: 40 (Korean check.).

Distribution: Korea, Japan.

#### Genus *Triglyphus* Loew, 1840

TS: *Triglyphus primus* Loew, 1840.

69. *Triglyphus primus* Loew, 1840: Öffentl. Prüf. Schüler K. Friedrich-Wilhelms- Gymnasiums zu Posen, 1840: 30 and Isis (Oken's), 1840 (VII-VIII): 565 (*Triglyphus*). TL: "Posen" [=Poznań]

(Poland). 좁꽃등에

Korean Records:

*Triglyphus primus*; Shiraki 1930: 251 (redescr.); ZSK 1968: 180 (Korean check.); Kim, CW 1971: 858 (redescr.); Kim, JI 1972: 15 (MS thesis); Peck 1988: 93 (Palearctic cat.); ESK & KSAE 1994: 290 (Korean check.); Kim, JI & Kim, JK 1996: 50 (Mts. Daian & Dutayeon).

*Triglyphus primus*; Hokuryukan 1932: 91 (redescr.); Kim, JI 1975: 39 (Korean check.); Kim, JI 1980: 383 (Korean check.).

Distribution: Europe, Russia, Korea.

## Tribe Cheilosini 별꽃등에속

Genus *Cheilosia* Meigen, 1822TS: *Eristalis scutellatus* Fallén, 1817.**70. *Cheilosia abbreviata* Shiraki, 1953:** Trans. Shikoku ent. Soc., 3(5-6): 87 (*Cheilosia*). TL:

"Kamikochi, Nagano Pref." (Japan). 난쟁이별꽃등에

## Korean Records:

*Cheilosia abbreviata*; Kim, CW 1971: 860 (redescrip.); Kim, JI 1972: 16 (MS thesis); Kim, JI 1975: 39 (Korean check.); Kim, JI 1980: 384 (Korean check.); Kim, JI & Yoo 1987b: 518 (DMZ vicinities); ESK & KSAE 1994: 290 (Korean check.); CFNM 1995: 477 (Jeju-do); Kim, JI & Kim, JK 1996: 50 (Mts. Daiam & Dutayeon).

Distribution: Korea, Japan (Honshu, Shikoku).

**71. *Cheilosia aterrima* (Sack, 1927):** Stettin. ent. Ztg, 88: 305 (*Cheilosia*). TL: "aus Toa Tsu

Kutsu" (Taiwan). 흐린날개별꽃등에

## Korean Records:

*Cheilosia aterrima*; Kim, JI & Kim, CW 1972: 8 (new Korean record); Kim, JI 1972: 17 (MS thesis); Kim, JI 1975: 39 (Korean check.); ESK & KSAE 1994: 290 (Korean check.).  
*Cheilosia aterrima*; Kim, JI 1980: 384 (Korean check.).

Distribution: Russian Far East, Korea, Japan, Oriental Region.

**72. *Cheilosia bombiformis* (Matsumura, 1916):** Thousand Ins. Japan, Add. 2: 220, pl. XVII, fig. 2 (*Nephomyia*). TL: "Honshu (Nikko)". 애꽃벌불이별꽃등에

## Korean Records:

*Cheilosia bombiformis*; Kim, JI 1980: 384 (Korean check.); Kim, JI et al. 1994: 153 (Mt. Gyeong); ESK & KSAE 1994: 290 (Korean check.).  
*Nephomyia bombiformis*; Doi 1938a: 9 (Korean check.).

Distribution: Korea, Japan.

**73. *Cheilosia facialis* Shiraki, 1968:** Fauna jap. Syrphidae, 2: 141 (*Cheilosia*). TL: "Tokusawa, near Kamikochi" (Japan). 얼굴별꽃등에

## Korean Records:

*Cheilosia facialis*; Kim, JI 1980: 384 (Korean check.); ESK & KSAE 1994: 290 (Korean check.).

Distribution: Korea, Japan.

**74. *Cheilosia fuscipennis* Shiraki, 1953:** Trans. Shikoku ent. Soc., 3(5-6): 90, pl. 3, fig. 5 (*Cheilosia*). TL: "Nakayama Pass., Tochigi Pref." (Japan). 검정갈별꽃등에

## Korean Records:

*Cheilosia fuscipennis*; Kim, CW 1971: 859 (redescrip.); Kim, JI 1972: 17 (MS thesis); Kim, JI 1975: 39 (Korean check.); Yoon & Nam 1979: 86 (Is. Geoje); Kim, JI 1980: 384 (Korean check.); Kim, CW & Nam 1982b: 129 (Mts. Gyeong, Sogyeong & Gachilbong); Kim, JI & Chang 1987: 113 (Mt. Taebaek); Kim, JI et al. 1994: 153 (Mt. Gyeong); ESK & KSAE 1994: 290 (Korean check.); Kim, JI & Kim, JK 1996: 50 (Mts. Daiam & Dutayeon).



Distribution: Korea, Japan (Hokkaido, Honshu, Shikoku).

- 75. *Cheilosia illustrata* (Harris, [1780]):** Expos. Eng. Ins.: 104 (*Musca*). TL: not given (England).

별꽃등에

*rupestris* (Panzer, [1798]): Faunae insect. germ., Fasc. 59: 13 (*Syrphus*). TL: "in Silesiae montibus" (Poland).

*magnifica* (Hellén, 1930): Notul. ent., 10: 29 (*Chilosia*). Type localities: "Gegenden des Stillen Meeres in Ostsibirien", "Ajan", "Kamtschatka: Ozernaja... und in Bolscherjetka" (Russia).

*portschinskiana* Stackelberg, 1960; Ent. Obozr., 39(2): 441 (*Cheilosia*). TL: Kirovakan, Armenia.

Korean Records:

*Cheilosia illustrata*; Shiraki 1968a: 92 (redescr.); Kim, JI 1980: 384 (Korean check.); Kim, JI 1981: 353 (Sudong-myeon); ESK & KSAE 1994: 290 (Korean check.).

Distribution: Europe, Russia (E. Siberia) to Korea.

- 76. *Cheilosia longiptera* Shiraki, 1968:** Fauna jap. Syrphidae, 2: 103 (*Cheilosia*). TL: "Mt.

Tadeshina, Nagano Pref" (Japan). 큰날개별꽃등에

Korean Records:

*Cheilosia longiptera*; Kim, JI et al. 1983: 206 (new Korean record).

*Cheilosia longiptera*; Peck 1988: 108 (Palearctic cat.); Ohara 1989: 788 (Japanese check.); ESK & KSAE 1994: 290 (Korean check.).

Distribution: Russian Far East (Kunashir, Shikotan Is), Korea, Japan (Honshu).

- 77. *Cheilosia matsumurana* (Shiraki, 1930):** Mem. Fac. Agric. Taihoku imp. Univ., 1(1): 316

(*Cheilosia*). TL: "Japan-Hokkaido (Josankei)". 먹별꽃등에

*luteipes* Shiraki, 1930: Mem. Fac. Agric. Taihoku imp. Univ., 1(1): 319 (*Cheilosia*). TL: "Japan-Honshu (Hakubasan), Hokkaido (Sapporo)".

Korean Records:

*Cheilosia luteipes*; Kim, CW 1971: 860 (redescr.); Kim, JI 1972: 18 (MS thesis); Kim, JI 1975: 39 (Korean check.); Yoon & Nam 1980: 155 (Mts. Chilgab & Gyeryong); Kim, JI & Chang 1982b: 176 (Is. Soan); Yoon et al. 1990: 123 (Mt. Gaya).

*Cheilosia matsumurana*; Shiraki 1968a: 63 (redescr.); Kim, JI 1980: 384 (Korean check.); ESK & KSAE 1994: 290 (Korean check.); CFNM 1995: 477 (Jeju-do).

*Chilosia luteipes*; Doi 1938a: 8 (Korean check.); Doi 1938b: 92 (Gaema-plateau); ZSK 1968: 179 (Korean check.).

Distribution: Russian Far East (Primorye Territory, Kunashir, Moneron Is), Korea, Japan (Hokkaido, Honshu).

- 78. *Chelosia motodomariensis* Matsumura, 1916:** Thousand Ins. Japan, Add. 2: 239, pl.

XVII, fig. 17 (*Cheilosia*). TL: "Saghalien (Motodomari)" [= Vostochnyi, Sakhalin]. 무늬별꽃등에

*unicolor* (Sack, 1941): Arb. morph. taxon. Ent. Berl., 8(3): 189 (*Chilosia*). TL: "Gaolinszy" (NE China).

*subillustrata* Stakelberg, 1963: Stutg. Beitr. Naturk., No. 113: 2 (*Cheilosia*). TL: "Baikit, Podkamennaya Tunguska, Ost-Sibirien" (E Siberia).

*unicolor* Shiraki, 1968: Fauna jap. Syrphidae, 2: 94 (*Cheilosia*). A junior primary homonym of *Ch.*

*unicolor* Sack, 1941. TL: "Mt. Tadeshina, Nagano Pref." (Japan: Honshu).

Korean Records:

*Cheilosia motodomariensis*; Kim, CW 1971: 861 (redescrip.); Kim, JI 1972: 18 (MS thesis); Kim, JI 1975: 39 (Korean check.); Kim, CW & Nam 1982b: 129 (Mts. Gyebang, Sogyebang & Gachilbong); Kim, JI & Chang 1987: 113 (Mt. Taebaek); Kim, JI 1994: 153 (Mt. Gyebang); ESK & KSAE 1994: 290 (Korean check.).

*Chilosia motodomariensis*; Doi 1938a: 8 (Korean check.); ZSK 1968: 179 (Korean check.).

Distribution: Siberia, Russian Far East, Mongolia, Korea, Japan.

**79. *Cheilosia ochripes* (Shiraki, 1930):** Mem. Fac. Agric. Taihoku imp. Univ., 1(1): 292

(*Cheilosia*). TL: "Japan-Hokkaido (Josankei, Sapporo). Sachalin-Odomari" (Japan: Hokkaido; Sakhalin: Korsakov). 뒷가슴가시털벌꽃등에

Korean Records:

*Cheilosia ochripes*; Kim, JI & Kim, CW 1972: 9 (new Korean record); Kim, JI 1972: 17 (MS thesis); Kim, CW et al. 1974: 245 (DMZ); Kim, JI 1975: 39 (Korean check.); Kim, JI 1980: 384 (Korean check.); ESK & KSAE 1994: 290 (Korean check.); CFNM 1995: 478 (Jeju-do); Kim, JI & Kim, JK 1996: 50 (Mts. Daiam & Dutayeon).

Distribution: Russian Far East (Sakhalin), Korea, Japan (Hokkaido).

**Genus *Ferdinandea* Rondani, 1844**

TS: *Conops cuprea* Scopoli, 1763.

**80. *Ferdinandea cuprea* (Scopoli, 1763):** Entom. carniolica: 355 (*Conops*). TL: "Carniolia"

[=Carinthia] (NE Yugoslavia). 두눈박이꽃등에

*rutilo* (Harris, [1780]): Expos. Eng. Ins.: 80, pl. X X IV, fig. 21 (*Musca*). TL: not given (England).

*nitens* (Villers, 1789): Caroli Linnaei entom., 3: 549 (*Musca*). TL: "Gallia Australiore" (France).

*testacicornis* Rondani, 1844: Nuovi Ann. Sci. nat. Ist. Bologna, (2) 2: 201 (*Ferdinandea*); nomen nudum, published in synonymy with *Ferdinandea cuprea* (Scopoli, 1763).

*suzukii* Matsumura, 1916: Thousand Ins. Japan, Add. 2: 224, pl. X VII, fig. 5 (*Ferdinandea*). TL: "Honshu (Kyoto)".

Korean Records:

*Ferdinandea cuprea*; ZSK 1968: 179 (Korean check.); Kim, CW 1971: 857 (redescrip.); Kim, JI 1972: 64 (MS thesis); Kim, CW et al. 1974: 246 (DMZ); Kim, JI 1975: 41 (Korean check.); Kim, JI 1980: 383 (Korean check.); Kim, JI & Park 1984: 43 (anatomy); ESK & KSAE 1994: 290 (Korean check.); Han et al. 1998: 10 (Yonsei Wonju Campus).

Distribution: Palearctic Region.

**81. *Ferdinandea nigrifrons* (Egger, 1860):** Verh. zool-bot. Ges. Wien, 10: 664

(*Chrysochlamys*). TL: "Austria,... Wiener Gegend". 검은이마큰벌꽃등에

Korean Records:

*Ferdinandea nigrifrons*; Kim, JI 1996: 178 (Mt. Bangtae).

*Ferdinandea nigrifrons*; Kim, JI et al. 1983: 204 (new Korean record); ESK & KSAE 1994: 290

(Korean check.).

Distribution: Europe, Korea

**82. *Ferdinandea ruficornis* (Fabricius, 1775):** Syst. entom.: 769 (*Syrphus*). TL: "Dania".

애두눈박이꽃등에

Korean Records:

*Ferdinandea ruficornis*; Han et al. 1998: 10 (Yonsei Wonju Campus).

Distribution: Europe, Russia, N. China, Korea.

### Genus *Rhingia* Scopoli, 1763

TS: *Conops' rostrata* Linnaeus, 1758.

**83. *Rhingia laevigata* Loew, 1858:** Wien. ent. Mschr., 2: 107 (*Rhingia*). TL: not given (Japan).

진꽃등에

*apicalis* Matsumura, 1905: Thousand Ins. Japan, Add., 2: 97, pl.25, fig.3 (*Rhingia*). TL: "Hokkaido, Honshu" (Japan).

Korean Records:

*Rhingia laevigata*; Doi 1938a: 9 (Korean check.); Doi 1938b: 92 (Gaema-plateau); ZSK 1968: 180 (Korean check.); Kim, CW 1971: 857 (redescr.); Kim, JI 1972: 19 (MS thesis); Kim, CW et al. 1974: 245 (DMZ); Kim, JI 1975: 39 (Korean check.); Kim, JI 1980: 384 (Korean check.); ESK & KSAE 1994: 290 (Korean check.); Kim, JI & Kim, JK 1996: 50 (Mts. Daiam & Dutayeon).

Distribution: Russian Far East (Khabarovsk & Primorye Territories, Sakhalin, Kunashir, Shikotan) to Korea, Japan (Hokkaido, Honshu).

### Tribe Callicerini 긴수염꽃등에족

#### Genus *Callicera* Panzer, 1809

TS: *Bibio aenea* Fabricius, 1781.

**84. *Callicera aenea* (Fabricius, 1781):** Species insect., 2: 413 (*Bibio*). TL: "Germania".

광택긴수염꽃등에

*aurata* (Rossi, 1790): Fauna Etrusca, 2: 288 (*Syrphus*). TL: "in provinciis Florentina et Pisana" [= Firenze and Pisa] (Italy).

*panzeri* Rondani, 1844: Annls Soc. ent. Fr., (2)2: 68 (*Callicera*, new name for *Callicera aenea* Panzer, 1809, not Fabricius, 1781).

Korean Records:

*Callicera aenea*; Han et al. 1998: 10 (Yonsei Wonju Campus).

Distribution: Palaearctic Region, Taiwan.

### Tribe Volucellini 대모꽃등에족

**Genus *Volucella* Geoffroy, 1762**

TS: *Musca pellucens* Linnaeus, 1758.

- 85. *Volucella coreana* Shiraki, 1930:** Mem. Fac. Agric. Taihoku imp. Univ., 1(1): 225 (*Volucella*). TL: "Korea (Koryo)". 참대모꽃등에

Korean Records:

*Volucella coreana*; Shiraki 1930: 225 (orig. desc TL: Korea (Koryo)); Sack 1931: 243 (redescrip.); FESGC 1932: 85 (Gwangneung Forest); Hokuryukan 1932: 115 (redescrip.); Doi 1938a: 10 (Korean check.); ZSK 1968: 179 (Korean check.); Kim, CW 1971: 862 (redescrip.); Kim, JI 1972: 82 (MS thesis); Kim, JI 1975: 41 (Korean check.); Kim, JI 1980: 385 (Korean check.); Peck 1988: 129 (Palearctic cat.); ESK & KSAE 1994: 290 (Korean check.).

Distribution: Russian Far East (Primorye Territory) to Korea.

- 86. *Volucella jeddona* Bigot, 1875:** Annls Soc. ent. Fr., (5) 5: 472 (*Volucella*). TL: "Japan". 대모꽃등에

*brevipila* Portschinsky, 1887: Trudy russk. ent. Obshch., 21(1-2): 7 (*Volucella*). TL: "Amur" (Russian Far East).

*nigrithrax* Zimina, 1961: Sb. Trud. zool. Mus. Mosk. Gos. Univ., 8: 143 (*Volucella*, as var. of *jeddona*). TL: Southern Primorye (Russia).

Korean Records:

*Volucella ioddona*; ZSK 1968: 179 (Korean check.).

*Volucella jeadona*; Kim, CW & Nam 1982b: 130 (Mts. Gyeong, Sogyeong & Gachilbong).

*Volucella jeddona*; Doi 1938a: 10 (Korean check.); Ku 1968: 35 (Mt. Myeongji); Kim, CW 1971: 864 (redescrip.); Kim, JI 1972: 82 (MS thesis); Kim, CW et al. 1974: 247 (DMZ); Kim, JI 1975: 41 (Korean check.); Kim, JI 1980: 385 (Korean check.); Kim, CH et al. 1991: 107 (Mt. Jiri); ESK & KSAE 1994: 291 (Korean check.); Kim, JI 1995a: 176 (Mt. Sobaek); Kim, JI & Kim, JK 1996: 50 (Mts. Daian & Dutayon); Kim, JI 1996: 178 (Mt. Bangtae).

*Volucella jedona*; Nagaoka 1940: 481 (Mt. Myohyang).

Distribution: Russian Far East (Primorye Territory, Sakhalin, Kunashir, Shikotan), Mongolia, Korea, Japan (Hokkaido, Honshu).

- 87. *Volucella nigricans* Coquillett, 1898:** Proc. U.S. natn. Mus., 21: 324 (*Volucella*). TL: not given (Japan). 검정대모꽃등에

Korean Records:

*Eoseristalis nigricans*; Kim, JI 1980: 387 (Korean check.); Kim, JI & Lee 1989: 180 (Is. Anma).

*Volucella nigricans*; Kim, CW et al. 1974: 247 (DMZ); Kim, CW & Nam 1982b: 130 (Mts. Gyeong, Sogyeong & Gachilbong).

*Volucella nigricans*; Okamoto 1924: 154 (Jeju-do); Shiraki 1930: 216 (redescrip.); FESGC 1932: 84 (Gwangneung Forest); Doi 1938a: 10 (Korean check.); Hokuryukan 1956: 1645 (redescrip.); Hokuryukan 1965: 209 (redescrip.); ZSK 1968: 179 (Korean check.); Shiraki 1968a: 215 (redescrip.); Seok 1970: 24 (Jeju-do); Kim, CW 1971: 863 (redescrip.); Kim, JI 1972: 83 (MS thesis); Kim, CW & Kim, JI 1972a: 92 (Mujugucheondong); Kim, JI 1975: 41 (Korean check.);

Knutson et al. 1975: 336 (Orient. cat.); Yoon & Nam 1980: 155 (Mts. Chilgab & Gyeryong); Kim, CW 1980: 293 (distr. map); Kim, JI 1980: 385 (Korean check.); Lee & Kwon 1981: 160 (Is. Ulreung & Dog); Kim, CW & Nam 1982a: 290 (Seoul); Kim, CW & Nam 1982c: 173 (Seoul); Kim, JI & Yoo 1987b: 518 (DMZ vicinities); Peck 1988: 130 (Palearctic cat.); Ohara 1989: 789 (Japanese check.); Kim, JI et al. 1991: 187 (Sockri); Park et al. 1993: 208 (Mt. Jiri); Kim, JI et al. 1994: 116 (Mt. Gwangdeok); ESK & KSAE 1994: 291 (Korean check.); CFNM 1995: 480 (Jeju-do); Kim, JI 1995a: 176 (Mt. Sobaek); Kim, JI 1996: 178 (Mt. Bangtae); Han et al. 1998: 10 (Yonsei Wonju Campus).

*Volucella nigricans*; Yoon et al. 1990: 123 (Mt. Gaya).

Distribution: Korea, Japan, Taiwan.

**88. *Volucella nigropicta* Portschinsky, 1884:** Trudy russk. ent. Obshch. [= Horae Soc. ent.

Ross.], 18(1-2): 127 (*Volucella*). TL: "Amur" (Russia). 육점박이대모꽃등에

*sexmaculata* Matsumura, 1916: Thousand Ins. Japan, Add. 2: 212. pl. X VI, fig. 26 (*Volucella*). TL: "Honshu" (Kyoto and Osaka)" (Japan).

Korean Records: The following records of *V. nigropicta* in Korea appear mostly misidentifications of *V. sp. near inanoides* Hervé-Bazin (see "Remarks").

*Volucella nigropicta*; Ohara 1989: 789 (Japanese check.); Kim, JI et al. 1994: 116 (Mt. Gwangdeok); ESK & KSAE 1994: 219 (Korean check.); Kim, JI 1995a: 176 (Mt. Sobaek); Kim, JI 1995b: 145 (Byeonsan Peninsula); Han et al. 1998: 10 (Yonsei Wonju Campus).

*Volucella sexmaculata*; Kim, CW & Kim, JI 1971: 168 (Sogeumgang & Mt. Odae); Kim, CW 1971: 865 (redescr.); Kim, JI 1972: 84 (MS thesis); Kim, CW & Kim, JI 1974: 122 (Mt. Naejang); Kim, JI 1975: 41 (Korean check.); Kim, CW 1980: 294 (distr. map); Kim, JI 1980: 385 (Korean check.); Nam & Kim, ML 1983: 132 (Mt. Jiri); Kim, JI & Park 1984: 42 (anatomy); Kim, CH et al. 1991: 107 (Mt. Jiri); Kim, JI et al. 1991: 187 (Mt. Sockri); Park et al. 1993: 208 (Mt. Jiri).

*Volucella sexmaculata*; Yoon et al. 1990: 123 (Mt. Gaya).

Distribution: Russian Far East (Primorye Territory), Korea, Japan (Honshu).

Remarks: So far as we confirmed, the above records are mixture of *Volucella nigropicta* and *V. sp. near inanoides* Hervé-Bazin (prob. new species). *V. nigropicta* is actually a very rare species (we have seen only three Korean specimens), but the other species has been repeatedly misidentified by Korean authors as *V. nigropicta* (= *V. sexmaculata*). This is probably because incorrect illustration and description were given in Kim, CW (1971), which has been used by most Korean workers for identification.

**89. *Volucella nitobei* Matsumura, 1916:** Thousand Ins. Japan, Add. 2: 210. pl. X VI, fig. 24 (*Volucella*). TL: "Honshu (Aomori, Kyoto and Osaka)". 니토베대모꽃등에

Korean Records:

*Volucella linearis*; ESK & KSAE 1994: 291 (Korean check.); Kim, JI 1995a: 176 (Mt. Sobaek).

*Volucella nitobei*; ZSK 1968: 179 (Korean check.); Kim, CW 1971: 864 (redescr.); Kim, JI 1972: 84 (MS thesis); Kim, JI 1975: 41 (Korean check.); Kim, JI 1980: 385 (Korean check.); Kim, CH et al. 1991: 107 (Mt. Jiri); Park et al. 1993: 208 (Mt. Jiri); Han et al. 1998: 10 (Yonsei Wonju Campus).

Distribution: Korea, Japan.

**90. *Volucella pellucens tabanoides* Motschulsky, 1859:** Bull. Soc. nat. Moscou, 32(2): 504

(*Volucella*, as species). TL: "des environs du fl. Amour, depuis la Schilka jusqu'à Nikolaëvsk"

(Russian Far East). 여러 대모꽃등에

Korean Records:

*Vollucella tabanoides*; Park & Cho 1986: 136 (Mts. Paegun, Kipaeg, & Hwangsok).

*Volucella noides*; Ku 1968: 35 (Mt. Myeongji).

*Volucella pellucens tabanoides*; Peck 1988: 131 (Palearctic cat.); Ohara 1989: 789 (Japanese check.); Kim, JI et al. 1994: 154 (Mt. Gyeong); ESK & KSAE 1994: 291 (Korean check.); CFNM 1995: 480 (Jeju-do); Kim, JI 1995a: 176 (Mt. Sobaek); Kim, JI 1996: 178 (Mt. Bangtae); Nam 1996: 307 (color photo); Han et al. 1998: 11 (Yonsei Wonju Campus).

*Volucella tabanoides*; Kim, JI 1972: 84 (MS thesis).

*Volucella tabanoides*; Shiraki 1930: 216 (redescr.); FESGC 1932: 84 (Gwangneung Forest); Nagaoka 1938: 27 (Mt. Myohyang); Doi 1938a: 11 (Korean check.); Hokuryukan 1956: 1646 (redescr.); Hokuryukan 1965: 209 (redescr.); ZSK 1968: 179 (Korean check.); Shiraki 1968a: 213 (redescr.); Kim, CW 1971: 863 (redescr.); Kim, CW & Kim, JI 1972a: 92 (Mujugucheondong); Kim, JI 1975: 41 (Korean check.); Kim, CW et al. 1976: 111 (Mt. Chiak); Ito et al. 1977: 254 (redescr.); Yoon & Nam 1980: 155 (Mts. Chilgab & Gyeryong); Kim, CW 1980: 295 (distr. map); Kim, JI 1980: 385 (Korean check.); Kim, CW & Nam 1982b: 130 (Mts. Gyeong, Sogyeong & Gachilbong); Kim, CW & Nam 1982c: 173 (Seoul); Kim, CW 1984: 91 (Mt. Jeombong); Nakane 1984: 13 (color photo); Kim, JI & Park 1984: 42 (anatomy); Kim, CH et al. 1991: 107 (Mt. Jiri); Park et al. 1993: 208 (Mt. Jiri).

*Volucella tubanoides*; Ra et al. 1987: 210 (Is. Heuksan).

Distribution: Siberia, Russian Far East, Mongolia, China, Korea, Japan (Hokkaido, Honshu).

**91. *Volucella suzukii* Matsumura, 1916:** Thousand Ins. Japan, Add. 2: 236. pl. X VII, fig. 14

(*Volucella*). TL: "Honshu (Kyoto)". 장수말벌집대모꽃등에

Korean Records:

*Volucella suzukii*; Kim, JI & Kim, CW 1972: 12 (new Korean record); Kim, CW & Kim, JI 1974: 122 (Mt. Naejang); Kim, JI 1975: 41 (Korean check.); Kim, JI 1980: 385 (Korean check.); ESK & KSAE 1994: 291 (Korean check.).

*Volucella olucella suzukii*; Kim, CW et al. 1976: 111 (Mt. Chiak).

Distribution: Japan (Honshu), Korea.

**Tribe Chrysogasterini 잠자리꽃등에족**

**Genus *Orthoneura* Macquart, 1829**

TS: *Chrysogaster elegans* Meigen, 1822.

**92. *Orthoneura karumaiensis* (Matsumura, 1916):** Ent. Mag., Kyoto, 2(1): 16 (*Pipizella*).

TL: "Honshu (Iwate)" (Japan). 별불이꽃등에

*ussuriana* (Stackelberg, 1930): Russk. ent. Obozr., 23(3-4): 248 (*Orthoneura*). TL: "Süd-Ussuri-Gebiet: Tjumenj-ula, an der Grenze von Russland und Korea; Nikolsk-Ussurijskij".

Korean Records:

*Orthoneura karumaiensis*; Kim, JI 1981: 353 (Sudong-myeon); Kim, JI et al. 1983: 205 (new Korean record); Kim, JI & Park 1984: 43 (anatomy); Peck 1988: 141 (Palearctic cat.); Ohara 1989: 790 (Japanese check.); ESK & KSAE 1994: 290 (Korean check.).

Distribution: Russian Far East (Khabarovsk & Primorye Territories), Korea, Japan (Honshu).

**Genus *Sphegina* Meigen, 1822**

TS: *Milesia clunipes* Fallén, 1816.

**93. *Sphegina japonica* Shiraki et Edashige, 1953:** Trans. Shikoku ent. Soc., 3(5-6): 108

(*Sphegina*). TL: "Omogo Valley, Ehime Pref." (Japan). 일본잠자리꽃등에 (신칭)

*macrocerca* Stackelberg, 1956: Ent. Obozr., 35(4): 938 (*Sphegina* (*Asiosphegina*)). TL: Sakhalin: Yuzhno-Sakhalinsk, Kunashir: Vodopadnoe.

Korean Records:

*Sphaegina japonica*; Kim, JI & Kim, JK 1996: 50 (Mts. Daiam & Dutayeon).

Distribution: Russian Far East (Sakhalin, Kuril Is), Korea, Japan (Honshu, Shikoku).

**94. *Sphegina clunipes* (Fallén, 1817):** Syrphici Sveciae: 12 (*Milesia*). TL: "Smolandia" [=prov.

Småland] (Sweden). 잠자리꽃등에

*nigra* Meigen, 1822: Syst. Besch., 3: 195 (*Sphegina*). TL: not given (?Stolberg near Aachen) [Germany].

*nigricornis* Macquart, 1829: Mém. Soc. Sci. Agric. Lille, 1827-1828: 166 and Ins. Dipt., 4: 18 (*Sphegina*). TL: "Nord de la France".

*flava* Macquart, 1834: Hist. nat. Ins., Dipt., 1: 577 (*Sphegina*). TL: "de Bordeaux" (France).

*elegans* Schummel, 1843: Uebers. schles. Ges. vaterl. Kult., 1842: 167 (*Sphegina*). TL: "Schlesien" (Poland).

Korean Records:

*Sphegina clunipes*; Hokuryukan 1965: 214 (redescrip.); Kim, JI 1972: 15 (MS thesis); Kim, JI 1975: 39 (Korean check.); Kim, JI 1980: 385 (Korean check.); Kim, JI et al. 1994: 154 (Mt. Gyeong); ESK & KSAE 1994: 290 (Korean check.).

Distribution: Europe, Russia, Korea, Japan (Hokkaido, Honshu).

**Tribe Sericomyini 줄꽃등에족**

**Genus *Sericomyia* Meigen, 1803**

TS: *Musca lappona* Linnaeus, 1758.

**95. *Sericomyia sachalinica* Stackelberg, 1926:** Annu. Mus. zool. Acad. Sci. USSR, 26(1/2):

92 (*Sericomyia*). TL: "insula Sachalin" (Russia, Sakhalin). 줄꽃등에

*japonica* Shiraki, 1930: Mem. Fac. Agric. Taihoku imp. Univ., 1(1): 45 (*Sericomyia*). TL: "Japan (Josankei, Sapporo und Teshio)" and "Sachalin (Korsakoff, Solowiyofka)" (Sakhalin, Russia).

*nigriceps* Shiraki, 1930: Mem. Fac. Agric. Taihoku imp. Univ., 1(1): 46 (*Sericomyia*). TL: "Hokkaido (Josankei), Sachalin (Toyohara)" (Japan: Hokkaido; Russia: Sakhalin (Yuzhno-Sakhalinsk)).

Korean Records:

*Sericomyia japonica*; Doi 1938a: 9 (Korean check.); ZSK 1968: 180 (Korean check.); Kim, CW 1971: 866 (redescr.); Kim, JI 1972: 58 (MS thesis); Kim, JI 1975: 40 (Korean check.); Kim, JI 1980: 385 (Korean check.).

*Sericomyia sachalinica*; ESK & KSAE 1994: 290 (Korean check.).

Distribution: Russian Far East (Sakhalin, Kunashir), Korea, Japan (Hokkaido).

**Tribe Eumerini 알뿌리꽃등에족**

**Genus *Eumerus* Meigen, 1822**

TS: *Syrphus tricolor* Fabricius, 1798.

**96. *Eumerus djakonovi* Stackelberg, 1952:** Trudy zool. Inst., Leningr., 12: 378 (*Eumerus*).

TL: Southern Primorye: Yakovlevka, Spassk district. 북방알뿌리꽃등에 (신칭)

Korean Records:

*Eumerus djakonovi*; Peck 1988: 156 (Palearctic cat.).

Distribution: E Siberia (Transbaikal), Russian Far East (Khabarovsk and Primorye Territories), Mongolia, Korea.

**97. *Eumerus iidai* Shiraki, 1952:** Mushi, 23(1): 9 (*Eumerus*). TL: "from the Mount Takao, near Tokyo". 이이다알뿌리꽃등에

Korean Records:

*Eumerus idaii*; Kim, JI 1972: 56 (MS thesis).

*Eumerus iidai*; Kim, JI & Kim, CW 1972: 10 (new Korean record); Kim, CW & Kim, JI 1972a: 92 (Mujugucheondong); Kim, CW et al. 1974: 246 (DMZ); Kim, JI 1975: 40 (Korean check.); Kim, CW et al. 1976: 111 (Mt. Chiak); Kim, JI 1980: 383 (Korean check.); Kim, JI & Chang 1982b: 175 (Is. Soan); Kim, JI & Yoo 1987b: 518 (DMZ vicinities); ESK & KSAE 1994: 290 (Korean check.).

Distribution: Korea, Japan (Honshu).

**98. *Eumerus japonicus* Matsumura, 1916:** Thousand Ins. Japan, Add. 2: 195, pl. X VI, fig. 11: and Ent. Mag., Kyoto, 2(1): 18 (*Eumerus*). TL: "Honshu (Kyoto)". 일본알뿌리꽃등에

Korean Records:

*Eumerus japonica*; Hokuryukan 1965: 212 (redescr.); Kim, JI & Yoo 1987b: 518 (DMZ vicinities);

*Eumerus japonicus*; Shiraki 1930: 96 (redescr.); Hokuryukan 1932: 114 (redescr.); Hokuryukan 1956: 1629 (redescr.); Shiraki 1968a: 16 (redescr.); Kim, JI 1972: 57 (MS thesis); Kim, CW & Kim, JI 1972a: 92 (Mujugucheondong); Kim, JI 1975: 40 (Korean check.); Kim, JI 1980: 383



(Korean check.); Kim, JI 1981: 353 (Sudong-myeon); Kim, JI & Park 1984: 43 (anatomy); Peck 1988: 158 (Palearctic cat.); Ohara 1989: 791 (Japanese check.); ESK & KSAE 1994: 290 (Korean check.).

Distribution: Russian Far East (Sakhalin, Primorye Territory) to Korea, Japan (Honshu, Shikoku).

99. *Eumerus kongosanensis* Shiraki, 1930: Mem. Fac. Agric. Taihoku imp. Univ., 1(1): 93 (*Eumerus*). TL: "Korea (Kongosan)". 금강산알뿌리꽃등에

Korean Records:

*Eumerus kongosanensis*; Shiraki 1930: 93 (orig. desc TK: Korea (Kongosan)); Kim, JI 1975: 40 (Korean check.); Kim, JI 1980: 383 (Korean check.); Peck 1988: 158 (Palearctic cat.); ESK & KSAE 1994: 290 (Korean check.).

Distribution: Korea.

100. *Eumerus strigatus* (Fallén, 1817): Syrphici Sveciae: 61 (*Pipiza*). TL: "Vestrogothia; et in Scania" [=prov. Västergötland and prov. Skåne] (Sweden). 알뿌리꽃등에  
*funeralis* Meigen, 1822: Syst. Besch., 3: 208 (*Eumerus*). TL: not given ("aus hiesiger Gegend") (?Stolberg near Aachen) [Germany]; "Österreich" (Austria).  
*grandicornis* Meigen, 1822: Syst. Besch., 3: 208 (*Eumerus*). TL: not given ("aus hiesiger Gegend") (?Stolberg near Aachen) [Germany]; "Österreich" (Austria).  
*lunulatus* Meigen, 1822: Syst. Besch., 3: 209 (*Eumerus*). TL: "Österreich" (Austria).  
*planifrons* Meigen, 1822: Syst. Besch., 3: 209 (*Eumerus*). TL: not given (Europe).  
*aeneus* Macquart, 1829: Mém. Soc. Sci. Agric. Lille, 1827-1828: 269 and Ins. Dipt., 4: 121 (*Eumerus*). TL: "Nord de la France".  
*melanopus* Rondani, 1857: Dipt. Ital. Prodrum., 2: 90 (*Eumerus*). TL: "in collibus ditionis parmensis... in Etruria" [=region of Parma and Toscana] (Italy).  
*rufitarsis* Strobl, 1906: Mem. R. Soc. esp. Hist. nat., 3: 329 (*Eumerus*, as var. of *lunulatus*). TL: "Villa Rutis" (Spain).  
*griseofasciatus* (Matsumura, 1916): Thousand Ins. Japan, Add. 2: 250, pl. 17, fig. 25 (*Paragopsis*). TL: "Hokkaido (Sapporo)".

Korean Records:

*Eumerus strigatus*; Kim, JI 1972: 57 (MS thesis); Kim, CW et al. 1974: 246 (DMZ); Kim, JI 1975: 40 (Korean check.); Kim, JI 1980: 383 (Korean check.); Kim, JI & Chang 1982b: 175 (Is. Soan); Kim, JI & Chang 1984: 175 (Is. Geomun); Peck 1988: 163 (Palearctic cat.); Kim, JI et al. 1991: 187 (Mt. Sockri); ESK & KSAE 1994: 290 (Korean check.).

Distribution: Palearctic Region, Nearctic Region (immigrant).

### Genus *Merodon* Meigen, 1803

TS: *Syrphus clavipes* Fabricius, 1781.

101. ?*Merodon equestris* (Fabricius, 1794): Entom. syst., 4: 292 (*Syrphus*). TL: "Italia".  
수선화꽃등에  
*flavicans* (Fabricius, 1794): Entom. syst., 4: 292 (*Syrphus*). TL: "Italia".

- ferrugineus* (Fabricius, 1805): Syst. antl.: 240 (*Eristalis*). TL: "Mogador" [=Essaouira] (Morocco).  
*narcissi* (Fabricius, 1805): Syst. antl.: 239 (*Eristalis*). TL: "in radicibus liliaciorum Galliae" (France).  
*constans* (Wiedemann in Meigen, 1822): Syst. Besch., 3: 354 (*Merodon*). TL: not given ("in der Hoffmannseggischen Sammlung") (Europe). In *Merodon* a junior secondary homonym of *Syrphus constans* Rossi, 1794.  
*nobilis* Meigen, 1822: Syst. Besch., 3: 353 (*Merodon*). TL: not given (Europe).  
*transversalis* Meigen, 1822: Syst. Besch., 3: 354 (*Merodon*). TL: not given (Europe).  
*validus* Wiedemann in Meigen, 1822: Syst. Besch., 3: 365 (*Merodon*). TL: "Süddeutschland" (S Germany).  
*bulborum* Rondani, 1845: Nuovi Ann. Sci. nat. 1st. Bologna, (2) 4: 256 and 259 (*Merodon*). TL: "Parma" (Italy).  
*tuberculatus* Rondani, 1845: Nuovi Ann. Sci. nat. 1st. Bologna, (2) 4: 256 (*Merodon*). TL: "Parma" (Italy).  
*nigrithorax* Bezzi, 1900: Bull. Soc. ent. ital., 32: 89 (*Merodon*, as var. of *equestris*). TL: "Macerata" [=Marche] (Italy).

Korean Records: all of the following records appear to be misidentifications of *Mallota* spp. (see "Remarks").

- Lampetia equestria*; Kim, CW & Nam 1982b: 129 (Mts. Gyeong, Sogyeong & Gachilbong).  
*Lampetia equestris*; Kim, CW 1971: 846 (redescrip.); Kim, JI 1972: 81 (MS thesis); Kim, CW & Kim, JI 1972a: 92 (Mujugucheondong); Kim, JI 1975: 41 (Korean check.); Kim, CW 1980: 278 (distr. map); Kim, CH et al. 1991: 106 (Mt. Jiri); CFNM 1995: 479 (Jeju-do).  
*Lampetia equestris*; Kim, CW & Nam 1982c: 172 (Seoul).  
*Lampetia equastris*; Kim, CW & Nam 1982a: 290 (Seoul).  
*Merodon equestris*; Kim, JI 1980: 388 (Korean check.); Kim, JI & Park 1984: 42 (anatomy); Kim, JI et al. 1991: 188 (Mt. Sockri); ESK & KSAE 1994: 290 (Korean check.); Kim, JI 1996: 178 (Mt. Bangtae).

Distribution: Europe, North Africa (Morocco, Egypt), Nearctic Region (immigrant).

Remarks: According to the distribution range of *M. equestris*, occurrence of this species in Korea is highly doubtful. Many records of this species, as far as we confirmed, are misidentifications of *Mallota* spp., most commonly *M. tricolor*. This is probably because incorrect illustration and description were given in Kim, CW (1971), which has been used by the most Korean workers for identification.

**102. *Merodon kawamurai* Matsumura, 1916:** Thousand Ins. Japan, Add. 2: 256, pl. X VIII, fig. 1 (*Merodon*). TL: "Kiushu (Kumamoto)". 진흙꽃등에

Korean Records:

- Merodon kawamura*; Kim, JI & Kim, CW 1972: 11 (new Korean record); Kim, JI 1972: 78 (MS thesis); Kim, JI 1975: 41 (Korean check.); Kim, JI 1980: 388 (Korean check.).  
*Merodon kawamurai*; ESK & KSAE 1994: 290 (Korean check.).

Distribution: Korea, Japan (Kyushu).

**Genus *Psilota* Meigen, 1822**TS: *Psilota anthracina* Meigen, 1822.

103. *Psilota brevicornis* Shiraki, 1968: Fauna jap. Syrphidae, 2: 56 (*Psilota*). TL: "Omogo, Ehime Pref." 잔털꽃등에

Korean Records:

*Psilota brevicornis*; Kim, JI et al. 1983: 205 (new Korean record); Peck 1988: 176 (Palearctic cat.); Ohara 1989: 791 (Japanese check.); ESK & KSAE 1994: 290 (Korean check.).

Distribution: Korea, Japan (Shikoku).

**Tribe Ceriodini 벌불이꽃등에족****Genus *Monoceromyia* Shannon, 1922**TS: *Ceria tricolor* Loew, 1861.

104. *Monoceromyia pleuralis* (Coquillett, 1898): Proc. U.S. natn. Mus., 21: 302 (*Sphiximorpha*). TL: not given (Japan). 벌불이꽃등에

Korean Records:

*Ceriana pleuralis*; Kim, JI 1980: 387 (Korean check.).*Monoceromyia pleuralis*; Kim, JI et al. 1994: 154 (Mt. Gyeonggang); ESK & KSAE 1994: 291 (Korean check.).

*Sphiximorphoides pleuralis*; Doi 1938a: 10 (Korean check.); ZSK 1968: 180 (Korean check.); Kim, CW 1971: 884 (redescrip.); Kim, JI 1972: 88 (MS thesis); Kim, JI 1975: 42 (Korean check.); Yoon & Nam 1980: 156 (Mts. Chilgab & Gyeryong); Kim, CW & Nam 1982b: 130 (Mts. Gyeonggang, Sogyeong & Gachilbong); Kim, CW & Nam 1982c: 173 (Seoul).

Distribution: Russian Far East (Khabarovsk and Primorye Territories), Korea, Japan (Honshu).

**Tribe Eristalini 순꽃등에족 (개칭)****Genus *Eristalinus* Londani, 1845**TS: *Musca sepulchralis* Linnaeus, 1758.

105. *Eristalinus (Eristalinus) aeneus* (Scopoli, 1763): Ent. Carniolica: 356 sex?; *Conops*. TL: Europe, M. comb. 검정루리꽃등에 (신칭)

Korean Records:

*Eristalinus aeneus*; Knutson et al. 1975: 347 (Orient. cat.).

Distribution: Holarctic, Oriental, Australian Regions.

106. *Eristalinus (Lathyrrophthalmus) quinquestriatus* (Fabricius, 1794): Entom. syst., 4: 289 (*Syrphus*). TL: "India orientali". 오줄루리꽃등에

*pictus* (Macquart, 1846): Mém. Soc. Sci. Agric. Lille, 1844: 258 and Dipt. exot., suppl. 1: 130

(*Eristalis*). TL: not given.

*aesepus* (Walker 1849): List Dipt. Brit. Mus., 3: 625 (*Eristalis*). TL: "China".

Korean Records:

*Eristalinus quinquestriatus*; ESK & KSAE 1994: 291 (Korean check.).

*Eristalis quinquestriatus*; Kim, JI 1980: 387 (Korean check.); Kim, JI & Yoo 1987b: 518 (DMZ vicinities).

*Lathyrrophthalmus quinqueshiatus*; Kim, CW & Nam 1982a: 290 (Seoul); Kim, CW & Nam 1982c: 173 (Seoul).

*Lathyrrophthalmus quinquestriatus*; Kim, CW 1971: 870 (redescr.); Kim, JI 1972: 75 (MS thesis); Kim, JI 1975: 41 (Korean check.).

Distribution: China, Korea, Japan, Oriental Region.

**107. *Eristalinus (Lathyrrophthalmus) tarsalis* (Macquart, 1855):** Mém. Soc. Sci. Agric.

Lille, 1854: 107 and Dipt. exot., suppl. 5: 87 (*Eristalis*). TL: "China boréale". 누리리꽃등에  
*ocularis* (Coquillett, 1898): Proc. U.S. natn. Mus., 21: 325 (*Eristalis*). TL: not given (Japan).

Korean Records:

*Eristalinus tarsalis*; Knutson et al. 1975: 349 (Orient. cat.); Peck 1988: 184 (Palaeartic cat.); Ohara 1989: 791 (Japanese check.); ESK & KSAE 1994: 291 (Korean check.); Han et al. 1998: 11 (Yonsei Wonju Campus).

*Eristalis ocularis*; Shiraki 1930: 138 (redescr.); Kim, JI 1980: 387 (Korean check.); Kim, JI 1981: 353 (Sudong-myeon); Kim, JI & Park 1984: 43 (anatomy); Kim, JI & Yoo 1987b: 518 (DMZ vicinities); CFNM 1995: 479 (Jeju-do).

*Eristalis ocularis*; Doi 1938a: 9 (Korean check.).

*Eristalis tarsalis*; Kim, JI 1995a: 177 (Mt. Sobaek).

*Lathyrrophthalmus ocularis*; Kim, JI & Park 1991: 226 (Daechung lake vicinities).

*Lathyrrophthalmus ocularis*; Kim, CW 1980: 279 (distr. map).

*Lathyrrophthalmus ocularis*; Shiraki 1968b: 182 (redescr.); Kim, CW & Kim, JI 1971: 169 (Sogumgang & Mt. Odae); Kim, CW 1971: 869 (redescr.); Kim, JI 1972: 73 (MS thesis); Kim, CW & Kim, JI 1972a: 92 (Mujugucheondong); Kim, CW & Kim, JI 1972b: 199 (Mt. Daedun); Kim, CW & Kim, JI 1974: 122 (Mt. Naejang); Kim, CW et al. 1974: 247 (DMZ); Kim, JI 1975: 41 (Korean check.); Kim, CW et al. 1976: 111 (Mt. Chiak); Kim, JI & Lee 1980: 85 (island Sinan-gun); Kim, CW & Nam 1982a: 290 (Seoul); Kim, CW & Nam 1982c: 173 (Seoul); Kim, JI & Chang 1987: 113 (Mt. Taebaek).

Distribution: China, Korea, Japan, Oriental Region.

**108. *Eristalinus (Lathyrrophthalmus) viridis* (Coquillett, 1898):** Proc. U.S. natn. Mus., 21:

326 (*Eristalis*). TL: not given (Japan). 누리리꽃등에

Korean Records:

*Eristalinus viridis*; ESK & KSAE 1994: 291 (Korean check.); Han et al. 1998: 11 (Yonsei Wonju Campus).

*Eristalis viridis*; Doi 1938a: 9 (Korean check.); Kim, JI 1980: 387 (Korean check.); Kim, JI 1981: 353 (Sudong-myeon); Kim, JI & Park 1984: 43 (anatomy); Kim, JI & Yoo 1987a: 226

(Mujugucheondong). *Lathyrrophthalmus viridis*; Kim, CW 1971: 870 (redescr.); Kim, JI 1972: 75 (MS thesis); Kim, JI 1975: 41 (Korean check.); Kim, CW & Nam 1982a: 290 (Seoul); Kim, CW & Nam 1982c: 173 (Seoul).

*Lathyrrophthamus viridis*; ZSK 1968: 179 (Korean check.).

Distribution: China, Korea, Japan (Honshu, Shikoku, Kyushu).

### Genus *Eristalis* Latreille, 1804

TS: *Musca tenax* Linnaeus, 1758.

#### 109. *Eristalis* (*Eoseristalis*) *arbustorum* (Linnaeus, 1758): Syst. Nat., Ed. 10, 1: 591

(*Musca*). TL: "Europa". 덩굴꽃등에

*lyra* (Harris, [1776]): Expos. Eng. Ins.: 42 (*Musca*). TL: not given (England).

*paralleli* (Harris, [1776]): Expos. Eng. Ins.: 43 (*Musca*). TL: not given (England).

*deflagrata* (Preyssler, 1793): Samml. Physik. Aufsätze, Dresden, 3: 369 (*Syrphus*). TL: "Böhmerwald" [=Šumava Mts] (Czechoslovakia).

*bulgarica* Szilády, 1934: Mitt. bulg. ent. Ges., 8: 151 (*Eristalis*). TL: "Rila-Monastir in Bulgarien" (Bulgaria), "Pest-szentimre in Zentralungarn" (Hungary), "Albanien bei Ipek" [=Peć] (Yugoslavia).

*polonica* Szilády, 1934: Mitt. bulg. ent. Ges., 8: 151 (*Eristalis*). TL: "Schlesien und ... bei Olkusz, in Polen" (Poland).

*strandi* Duda, 1940: Folia zool. Hydrobiol., Riga, 10(1): 225 (*Eristalis*, as var. of *arbustorum*). TL: "Gellivara (Lappland)" (Sweden).

#### Korean Records:

*Eoseristalis arbustorum*; Kim, JI 1980: 387 (Korean check.); Kim, JI & Chang 1987: 113 (Mt. Taebaek); Kim, JI & Yoo 1987b: 518 (DMZ vicinities); Kim, JI et al. 1991: 188 (Mt. Sockri).

*Eristalis arbustorum*; Kim, CW et al. 1971: 57 (Is. Ulreung); Kim, CW 1971: 868 (redescr.); Kim, JI 1972: 72 (MS thesis); Kim, CW et al. 1974: 247 (DMZ); Kim, JI 1975: 41 (Korean check.); Kim, CW et al. 1976: 111 (Mt. Chiak); Kim, CW & Nam 1977: 137 (Mt. Jogye); Kim, JI & Lee 1980: 85 (island Sinan-gun); Yoon & Nam 1980: 155 (Mts. Chilgab & Gyeryong); Kim, CW 1980: 272 (distr. map); Lee & Kwon 1981: 160 (Is. Ulreung & Dog); Kim, CW & Nam 1982a: 290 (Seoul); Kim, CW & Nam 1982c: 173 (Seoul); Kim, JI & Chang 1984: 174 (Is. Geomun); Kim, CW et al. 1985: 108 (Mt. Juwang); Kim, CH et al. 1991: 106 (Mt. Jiri); Park et al. 1993: 208 (Mt. Jiri); ESK & KSAE 1994: 291 (Korean check.); Kim, JI 195a: 177 (Mt. Sobaek); Han et al. 1998: 11 (Yonsei Wonju Campus).

Distribution: Holarctic, Oriental Regions.

#### 110. *Eristalis* (*Eoseristalis*) *cerealis* Fabricius, 1805: Syst. antl.: 232 (*Eristalis*). TL: "China".

배짚은꽃등에

*incisuralis* Loew, 1858: Wien. ent. Mschr., 2: 108 (*Eristalis*). TL: not given (Japan).

*sachalinensis* Matsumura, 1916: Thousand Ins. Japan, Add. 2: 263, pl. X VIII, fig. 7 (*Eristalis*). TL: "Saghalien".

#### Korean Records:

*Eoseristalis cerealis*; Kim, JI 1980: 387 (Korean check.); Kim, JI 1981: 353 (Sudong-myeon); Kim, JI & Park 1984: 43 (anatomy); Kim, JI & Chang 1984: 174 (Is. Geomun); Kim, JI & Chang 1987: 113 (Mt. Taebaek); Kim, JI & Yoo 1987a: 226 (Mujugucheondong); Kim, JI & Yoo 1987b: 518 (DMZ vicinities); Kim, JI & Lee 1989: 180 (Is. Anma); Kim, CH et al. 1991: 106 (Mt. Jiri); Kim, JI & Park 1991: 226 (Daechung lake vicinities); Park et al. 1993: 208 (Mt. Jiri).

*Eristalis cerealis*; Ichigawa; 1906: 184 (Jeju-do); Okamoto 1924: 155 (Jeju-do); Shiraki 1930: 130 (redescr.); Masaki 1936: 258 (faunal report); Nagaoka 1938: 28 (Mt. Myohyang); Doi 1938a: 8 (Korean check.); Cho 1955: 202 (Is. Ulreung); Cho 1955: 247 (Is. Ulreung); Kim, HK 1958: 100 (Is. Deokjeok); Cho 1963: 231 (Jeju-do); Cho 1965: 200 (Is. Ulreung); Ku 1968: 35 (Mt. Myeongji); ZSK 1968: 179 (Korean check.); Shiraki 1968b: 155 (redescr.); Seok 1970: 23 (Jeju-do); Kim, CW & Kim, JI 1971: 169 (Sogeuimgang & Mt. Odae); Kim, CW 1971: 868 (redescr.); Kim, JI 1972: 72 (MS thesis); Kim, CW & Kim, JI 1972a: 92 (Mujugucheondong); Kim, CW & Kim, JI 1974: 122 (Mt. Naejang); Kim, CW et al. 1974: 247 (DMZ); Kim, JI 1975: 41 (Korean check.); Knutson et al. 1975: 351 (Orient. cat.); Kim, CW et al. 1976: 111 (Mt. Chiak); Kim, CW & Nam 1977: 137 (Mt. Jogye); Kim, JI & Lee 1980: 85 (island Sinan-gun); Yoon & Nam 1980: 155 (Mts. Chilgab & Gyeryong); Kim, CW 1980: 273 (distr. map); Lee & Kwon 1981: 160 (Is. Ulreung & Dog); Kim, CW & Nam 1982a: 290 (Seoul); Park & Kim 1982: 40 (Mt. Jiri); Kim, JI & Chang 1982a: 151 (Is. Deokjeok); Kim, CW & Nam 1982b: 130 (Mts. Gyeong, Sogyeong & Gachilbong); Kim, CW & Nam 1982c: 173 (Seoul); Nam & Kim, ML 1983: 133 (Mt. Jiri); Kim, CW & Nam 1984: 91 (Mt. Jeombong); Kim, CW et al. 1985: 108 (Mt. Juwang); Kim, CW & Nam 1985: 106 (Mt. Baekun); Park & Cho 1986: 136 (Mts. Paegun, Kipaeg, & Hwangso); Choo 1987: 118 (collected from peach and plum blossom); Peck 1988: 186 (Palearctic cat.); Ohara 1989: 791 (Japanese check.); Kim, JI et al. 1991: 188 (Mt. Sockri); Kim, JI et al. 1994: 154 (Mt. Gyeong); Kim, JI et al. 1994: 116 (Mt. Gwangdeok); ESK & KSAE 1994: 291 (Korean check.); CFNM 1995: 478 (Jeju-do); Kim, JI 1995a: 177 (Mt. Sobaek); Kim, JI 1995b: 145 (Byeonsan Peninsula); Kim, JI & Kim, JK 1996: 50 (Mts. Daiam & Dutayeon); Kim, JI 1996: 178 (Mt. Bangtae); Nam 1996: 309 (color photo); Kwon et al. 1997: 35 (as useful insect); Han et al. 1998: 11 (Yonsei Wonju Campus).

*Eristalis corealis*; Kim, CW & Nam 1978: 138 (Imgye-myon); Yoon et al. 1990: 123 (Mt. Gaya).

Distribution: Russian Far East (Khabarovsk and Primorye Territories, Sakhalin, Kuril Is) to China, Korea, Japan, Oriental Region.

111. *Eristalis (Eoseristalis) japonica* van der Goot, 1964: Beaufortia, 10(127): 218

(*Eristalis*, new name for *E. nigricans* Matsumura, 1905, a junior primary homonym of *Eristalis nigricans* Wiedemann, 1830). 흰줄꽃등에

*nigricans* Matsumura, 1905: Thousand Ins. Japan, Add. 2: 93, pl. X X V fig. 13 (*Eristalis*). TL: "Hokkaido" (Japan).

Korean Records:

*Eristalis japonica*; ESK & KSAE 1994: 292 (Korean check.); CFNM 1995: 479 (Jeju-do).

*Eristalis nigricans*; Doi 1938a: 8 (Korean check.); Doi 1938b: 92 (Gaema-plateau); Cho 1963: 230 (Jeju-do); ZSK 1968: 179 (Korean check.); Kim, CW 1971: 867 (redescr.); Kim, JI 1972: 74

(MS thesis); Kim, JI 1975: 41 (Korean check.).

Distribution: Russian Far East (Primorye Territory, Kunashir, Shikotan) to Korea, Japan (Hokkaido).

112. *Eristalis (Eristalis) tenax* (Linnaeus, 1758): Syst. Nat., Ed. 10, 1: 591 (*Musca*). TL:

“Svecia” (Sweden). 꽃등에

*interrupta* (Poda, 1761): Insect. Mus. Graecensis: 118 (*Conops*). TL: not given (“ad Graecium”) [=near Graz] (Austria).

*fuscus* (Scopoli, 1763): Entom. carniolica: 355 (*Conops*); unjustified new name for *interrupta* Poda, 1761.

*vulgaris* (Scopoli, 1763): Entom. carniolica: 354 (*Conops*). TL: not given (Carniolia) (NE Yugoslavia).

*porcina* (De Geer, 1776): Mém. Ins., 6: 98 (*Musca*); unjustified new name for *tenax* Linnaeus, 1758.

*obfuscata* (Gmelin, 1790): Syst. Nat., Ed. 13, 1(5): 2880 (*Musca*); unjustified new name for *Conops fuscus* Scopoli, 1763.

*campestris* Meigen, 1822: Syst. Besch., 3: 387 (*Eristalis*). TL: “Österreich” (Austria).

*hortorum* Meigen, 1822: Syst. Besch., 3: 387 (*Eristalis*). TL: not given (Europe).

*sylvatica* Meigen, 1822: Syst. Besch., 3: 388 (*Eristalis*). TL: “Österreich” (Austria).

*vulpina* Meigen, 1822: Syst. Besch., 3: 388 (*Eristalis*). TL: “Österreich” (Austria).

*sinensis* Wiedemann, 1824: Analecta ent.: 37 (*Eristalis*). TL: “China”.

*ventralis* Thomson, 1869: in K. svenska fregatten Eugenies resa, 2(1): 489 (*Eristalis*). TL: “China”.

*alpina* Strobl, 1909: Mitt. naturw. Ver. Steierm., 46: 106 (*Eristalis*, as var. of *tenax*). TL: “Alpenwiesen des Pyrgas” (Austria).

*claripes* Santos Abreu, 1924: Mems R. Acad. Cienc. Artes, Barcelona, (3) 19(1): 104 (*Eristalis*, as var. of *tenax*). TL: “isla de Tenerife” (Canary Is).

#### Korean Records:

*Eristalis tenax*; Okamoto 1924: 155 (Jeju-do); Maruta 1929: 360 (light trap catch from Konggi-do); Shiraki 1930: 140 (redescrip.); Maruta 1931: 48 (light trap catch from Konggi-do); Cho 1963: 231 (Jeju-do); ZSK 1968: 179 (Korean check.); Hyun & Woo 1969: 199 (Mt. Jiri); Kim, JI 1980: 387 (Korean check.); Kim, JI 1981: 353 (Sudong-myeon); Kim, JI & Park 1984: 43 (anatomy); Kim, JI & Yoo 1987a: 226 (Mujugucheondong); Kim, JI & Yoo 1987b: 518 (DMZ vicinities); Kim, JI & Lee 1989: 180 (Is. Anma); Kim, CH et al. 1991: 106 (Mt. Jiri); Kim, JI et al. 1991: 188 (Mt. Sockri); Kim, JI & Park 1991: 226 (Daechung lake vicinities); Kim, JI et al. 1994: 154 (Mt. Gyeong); Park et al. 1993: 208 (Mt. Jiri); Kim, JI et al. 1994: 116 (Mt. Gwangdeok); ESK & KSAE 1994: 292 (Korean check.); CFNM 1995: 479 (Jeju-do); Kim, JI 1995a: 177 (Mt. Sobaek); 1995b: 145 (Byeonsan Peninsula); Kim, JI & Kim, JK 1996: 50 (Mts. Daiam & Dutayeon); Kim, JI 1996: 178 (Mt. Bangtae); Nam 1996: 310 (color photo); Han et al. 1998: 11 (Yonsei Wonju Campus).

*Eristallomyia tenax*; Park & Kim 1982: 40 (Mt. Jiri).

*Eristalomyia tenax*; Shiraki 1968b: 163 (redescrip.).

*Eristalomyia tenax*; Hokuryukan 1932: 115 (redescrip.); Masaki 1936: 258 (faunal report); Doi 1938a: 9 (Korean check.); Doi 1938b: 92 (Gaema-plateau); Nagaoka 1940: 481 (Mt. Myohyang); Kim, HK 1958: 100 (Is. Deokjeok); Kim, CH 1961: 27 (Mt. Jiri); Hokuryukan 1965: 212

(redescrip.); Seok 1970: 24 (Jeju-do); Kim, CW et al. 1971: 57 (Is. Ulreung); Kim, CW & Kim, JI 1971: 169 (Sogeu-mgang & Mt. Odae); Kim, CW 1971: 878 (redescrip.); Kim, JI 1972: 69 (MS thesis); Kim, CW & Kim, JI 1972a: 92 (Mujugucheondong); Kim, CW & Kim, JI 1974: 122 (Mt. Naejang); Kim, CW et al. 1974: 246 (DMZ); Kim, JI 1975: 41 (Korean check.); Kim, CW et al. 1976: 111 (Mt. Chiak); Kim, CW & Nam 1977: 137 (Mt. Jogye); Kim, CW 1978: 138 (Imgyemyon); Kim, JI & Lee 1980: 85 (island Sinan-gun); Yoon & Nam 1979: 86 (Is. Geoje); Yoon & Nam 1980: 155 (Mts. Chilgab & Gyeryong); Kim, CW 1980: 275 (distr. map); Lee & Kwon 1981: 160 (Is. Ulreung & Dog); Kim, JI & Chang 1982a: 151 (Is. Deokjeok); Kim, CW & Nam 1982a: 290 (Seoul); Kim, CW & Nam 1982b: 130 (Mts. Gyeong, Sogyeong & Gachilbong); Kim, JI & Chang 1982b: 175 (Is. Soan); Kim, CW & Nam 1982c: 173 (Seoul); Nam & Kim, ML 1983: 132 (Mt. Jiri); Kim, CW & Nam 1984: 91 (Mt. Jeombong); Kim, JI & Chang 1984: 175 (Is. Geomun); Kim, CW & Nam 1985: 106 (Mt. Baekun); Kim, CW et al. 1985: 108 (Mt. Juwang); Park & Cho 1986: 136 (Mts. Paegun, Kipaeg, & Hwangsok); Kim, JI & Chang 1987: 113 (Mt. Taebaek); Ra et al. 1987: 210 (Is. Heuksan); Lee & Ko 1989: 212 (Oeyeon Islands); Yoon et al. 1990: 123 (Mt. Gaya).

*Eristalomyia tenax*; Ku 1968: 35 (Mt. Myeongji).

Distribution: Cosmopolitan.

### Genus *Phytomyia* Guérin-Ménéville, 1834

TS: *Eristalis chrysopygus* Wiedemann, 1819.

#### 113. *Phytomyia zonata* (Fabricius, 1787): Mantissa insect., 2: 337 (*Syrphus*). TL: "China".

왕꽃등에

*sinensis* (Gmelin, 1790): Syst. Nat., Ed. 13: 1(5): 2872 (*Musca*); unjustified new name for *Syrphus zonata* Fabricius, 1787.

*zonalis* (Fabricius, 1794): Entom. syst., 4: 294 (*Syrphus*); unjustified emendation for *zonata* Fabricius, 1787.

*datamus* (Walker, 1849): List Dipt. Brit. Mus., 3: 628 (*Eristalis*). TL: not given.

*cingulata* (Vollenhoven, 1863): Versl. Meded. K. Akad. wet. Amst., 15: 12 (*Megaspis*). TL: "Japan".

Korean Records:

*Megaspis zonalis*; Okamoto 1924: 155 (Jeju-do); Cho 1963: 231 (Jeju-do).

*Megaspis zonata*; Shiraki 1930: 152 (redescrip.); Nagaoka 1938: 27 (Mt. Myohyang); Doi 1938a: 9 (Korean check.); Okada 1941: 262 (Korean record); Kim, HK 1958: 100 (Is. Deokjeok); Kim, CH 1961: 27 (Mt. Jiri); Ku 1968: 35 (Mt. Myeongji); ZSK 1968: 180 (Korean check.); Seok 1970: 24 (Jeju-do); Kim, CW 1971: 883 (redescrip.); Kim, JI 1972: 67 (MS thesis); Kim, JI 1975: 41 (Korean check.); Yoon & Nam 1980: 155 (Mts. Chilgab & Gyeryong); Kim, CW 1980: 280 (distr. map); Kim, JI 1980: 388 (Korean check.); Lee & Kwon 1981: 160 (Is. Ulreung & Dog); Kim, CW & Nam 1982a: 290 (Seoul); Kim, CW & Nam 1982c: 173 (Seoul); Kim, JI & Park 1984: 43 (anatomy); Kim, JI & Chang 1987: 113 (Mt. Taebaek); Kim, JI & Yoo 1987a: 226 (Mujugucheondong); Kim, CH et al. 1991: 106 (Mt. Jiri); Park et al. 1993: 208 (Mt. Jiri); CFNM



1995: 479 (Jeju-do).

*Phytomia zonata*; Knutson et al. 1975: 357 (Orient. cat.); Peck 1988: 193 (Palearctic cat.); Ohara 1989: 792 (Japanese check.); ESK & KSAE 1994: 292 (Korean check.).

Distribution: Russian Far East (Primorye Territory), NE China, Korea, Japan, Oriental Region.

### Genus *Pseuderistalis* Shiraki, 1930

TS: *Pseuderistalis bicolor* Shiraki, 1930.

#### 114. *Pseuderistalis bicolor* Shiraki, 1930: Mem, Fac. Agric. Taihoku imp. Univ. 1: 148

(*Eristalis*). Type locality: "Suisha, Formosa" (Taiwan). 노랑가슴꽃등에

Korean Records:

*Pseuderistalis bicolor*; ZSK 1968: 180 (Korean check.); Kim, CW 1971: 883 (redescr.); Kim, JI 1972: 76 (MS thesis); Kim, JI 1975: 41 (Korean check.).

Distribution: Korea, Taiwan.

### Genus *Helophilus* Meigen, 1822

TS: *Musca pendula* Linnaeus, 1758.

#### 115. *Helophilus* (*Helophilus*) *sapporensis* Matsumura, 1911: J. Coll. Agric. Hokkaido imp.

Univ., 4(1): 75 and Thousand Ins. Japan, Add. 2, 1916: 245 (*Helophilus*, as var. of *pendulus*

Linnaeus). TL: "Naipitchi" [=Sakhalin: Bykov]. 샷포로수중다리꽃등에

*lateralis* Matsumura, 1916: Thousand Ins. Japan, Add. 2: 247 (*Helophilus*), TL: "Hokkaido (Sapporo)".

Korean Records:

*Helophilus sapporensis*; Kim, CW 1971: 846 (redescr.); Kim, JI 1972: 79 (MS thesis); Kim, JI 1980: 388 (Korean check.); Kim, CW & Nam 1982c: 172 (Seoul); ESK & KSAE 1994: 292 (Korean check.); Han et al. 1998: 11 (Yonsei Wonju Campus).

*Helophilus saspporensis*; Kim, JI 1975: 41 (Korean check.).

*Olbiosyrphus sapporensis*; Ku 1968: 35 (Mt. Myeongji).

Distribution: Russian Far East (Sakhalin, Kuril Is, Khabarovsk and Primorye Territories); to Korea, Japan (Hokkaido).

#### 116. *Helophilus* (*Helophilus*) *virgatus* Coquillett, 1898: Proc. U.S. natn. Mus., 21: 326

(*Helophilus*). TL: not given (Japan). 수중다리꽃등에

*frequens* Matsumura, 1905: Thousand Ins. Japan, 2: 103 (*Helophilus*). TL: "Hokkaido, Honshu" (Japan).

Korean Records:

*Helophilus frequens*; Okamoto 1924: 155 (Jeju-do); Cho 1963: 231 (Jeju-do); ZSK 1968: 179 (Korean check.); Seok 1970: 24 (Jeju-do); Kim, JI 1972: 79 (MS thesis).

*Helophilus virgatus*; Doi 1938a: 9 (Korean check.); Kim, JI 1980: 388 (Korean check.); Kim, JI & Park 1984: 43 (anatomy); Kim, JI & Yoo 1987b: 518 (DMZ vicinities); Kim, JI et al. 1991: 188

(Mt. Sockri); Kim, JI & Park 1991: 226 (Daechung lake vicinities); Kim, JI et al. 1994: 154 (Mt. Gyeong); Kim, JI et al. 1994: 116 (Mt. Gwangdeok); ESK & KSAE 1994: 292 (Korean check.); CFNM 1995: 479 (Jeju-do); Kim, JI 1995a: 177 (Mt. Sobaek); Kim, JI 1995b: 145 (Byeonsan Peninsula); Kim, JI & Kim, JK 1996: 50 (Mts. Daiam & Dutayeon); Kim, JI 1996: 178 (Mt. Bangtae); Nam 1996: 311 (color photo); Han et al. 1998: 11 (Yonsei Wonju Campus).

*Mesembrius flavipes*; Nam 1996: 312 (color photo: misidentification).

*Tubifera virgatus*; ZSK 1968: 179 (Korean check.); Hyun & Woo 1969: 200 (Mt. Jiri); Kim, CW & Kim, JI 1971: 168 (Sogyeumgang & Mt. Odae); Kim, CW 1971: 871 (redescr.); Kim, JI 1972: 76 (MS thesis); Kim, CW & Kim, JI 1972a: 92 (Mujugucheondong); Kim, CW & Kim, JI 1974: 122 (Mt. Naejang); Kim, JI 1975: 41 (Korean check.); Kim, CW et al. 1976: 111 (Mt. Chiak); Kim, CW & Nam 1977: 137 (Mt. Jogye); Yoon & Nam 1980: 155 (Mts. Chilgab & Gyeryong); Kim, CW 1980: 292 (distr. map); Kim, JI 1981: 353 (Sudong-myeon); Kim, CW & Nam 1982a: 290 (Seoul); Kim, CW & Nam 1982b: 130 (Mts. Gyeong, Sogyeong & Gachilbong); Kim, CW & Nam 1982c: 173 (Seoul); Nam & Kim, ML 1983: 132 (Mt. Jiri); Kim, CW et al. 1985: 108 (Mt. Juwang); Kim, JI & Chang 1987: 113 (Mt. Taebaek); Kim, CH et al. 1991: 107 (Mt. Jiri); Park et al. 1993: 208 (Mt. Jiri).

Distribution: Russian Far East (Sakhalin, Kuril Is, Primorye Territory), China, Korea, Japan (Hokkaido, Honshu, Kyushu).

**117. *Helophilus (Helophilus) zodinus* Matsumura, 1931:** 6000 illustr. Ins. Jap. Emp.: 341 (*Helophilus*). TL: "Honshu" (Japan). 수중다리불이꽃등에

Korean Records:

*Helophilus zodinus*; Kim, JI 1974: 9 (new Korean record); Kim, JI 1975: 41 (Korean check.); Kim, JI 1980: 388 (Korean check.); Kim, JI et al. 1994: 154 (Mt. Gyeong); ESK & KSAE 1994: 292 (Korean check.).

*Helophilus judinus* [misspelling]; ZSK 1968: 179 (Korean check.); Kim, JI 1972: 79 (MS thesis); Kim, JI 1975: 41 (Korean check.).

Distribution: Korea, Japan (Honshu).

**Genus *Mallota* Meigen, 1822**

TS: *Syrphus fuciformis* Fabricius, 1794.

**118. *Mallota analis* (Shiraki, 1968):** Fauna jap. Syrphidae, 3: 241 (*Imatisma*). TL: "Yakushima Is." (Japan). 검정뒤영꽃등에

Korean Records:

*Mallota analis*; Han et al. 1998: 11 (Yonsei Wonju Campus).

Distribution: Korea, Japan.

**119. *Mallota dimorpha* (Shiraki, 1930):** Mem. Fac. Agric. Taihoku imp. Univ., 1(1): 202 (*Imatisma*). TL: "Japan-Hokkaido (Teshio, Josankei, Sapporo); Honshu (Tokyo, Chuzenji). Mandschurei-Shrei". 쌍형꽃등에

*floreae* Violovitsh, 1952: Soobshcheniya Dalnevostochnogo filiala AN SSSR, 4: 57 (*Mallota*). TL:

Poronaysk district (Sakhalin).

Korean Records:

*Imatisma dimorpha*; Morita 1935: 527 (new Korean record); Kim, CW 1971: 845 (redescr.); Kim, JI 1972: 80 (MS thesis); Kim, JI 1975: 41 (Korean check.); Kim, CW 1980: 277 (distr. map); Kim, JI 1980: 388 (Korean check.); Kim, CW & Nam 1982b: 129 (Mts. Gyeong, Sogyeong & Gachilbong); Kim, JI & Yoo 1987b: 518 (DMZ vicinities); Kim, CH et al. 1991: 106 (Mt. Jiri); Kim, JI et al. 1991: 188 (Mt. Sockri); Park et al. 1993: 208 (Mt. Jiri).

*Mallota dimorpha*; Kim, JI et al. 1994: 154 (Mt. Gyeong); ESK & KSAE 1994: 292 (Korean check.); Han et al. 1998: 11 (Yonsei Wonju Campus).

*Mallota diomphalia*; Kim, JI 1996: 178 (Mt. Bangtae).

Distribution: Russian Far East (Sakhalin, Kuril Is, Khabarovsk and Primorye Territories), NE China, Korea, Japan (Hokkaido, Honshu).

120. *Mallota eurasiatica* Stackelberg, 1950: Ent. Obozr., 31(1-2): 292 (*Mallota*). TL; Sverdlovsk (Ural); Jakovlevka, Spassk district, Primorye region. 유라시아꽃등에

Korean Records:

*Mallota eurasiatica*; Peck 1988: 201 (Palearctic cat.); Ohara 1989: 792 (Japanese check.); ESK & KSAE 1994: 292 (Korean check.).

Distribution: Russia, Korea, Japan.

121. *Mallota koreana* Enderlein, 1934: Sber. Ges. naturf. Freunde Berl., 1934(4-7): 186 (*Bombozelosis*). TL: "Nord Korea (Ompo)". 한국털꽃등에 (신칭)  
*coreana* (Enderlein, 1937): Sber. Ges. naturf. Freunde Berl., 1936(8-10): 434; error or emendation.

Korean Records:

*Mallota koreana*; Peck 1988: 201 (Palearctic cat.).

Distribution: Korea.

122. *Mallota takasagoensis* Matsumura, 1916: Thousand Ins. Japan, Add. 2: 203, pl.X VI. fig. 18 (*Mallota*). TL: "Honshu (Takasago, Kyoto, Tokyo) and Kiushu (Kumamoto)". 왕진흙꽃등에

Korean Records:

*Mallota takasagoensis*; ESK & KSAE 1994: 292 (Korean check.).

*Pseudomerodon takasagoensis*; Kim, JI & Kim, CW 1972: 11 (new Korean record); Kim, JI 1975: 41 (Korean check.); Kim, JI 1980: 388 (Korean check.).

Distribution: Korea, Japan (Honshu, Kyushu).

123. *Mallota tricolor* Loew, 1871: Besch. europ. Dipt., 2: 234 (*Mallota*). TL: "die Gegend von Sarepta" [=environs of Krasnoarmeysk near Volgograd] (Russia). 삼색꽃등에 (신칭)

Korean Records:

*Pseudomallota tricolor*; Shiraki 1968b: 244 (redescr.).

*Mallota tricolor*; Han et al. 1998: 11 (Yonsei Wonju Campus).

Distribution: Europe, Russia, Turkey, China, Korea.

Remarks: We found that this species had been repeatedly misidentified as *Merodon equestris* in the past (see "Remarks" of *M. equestris*).

**Genus *Mesembrius* Rondani, 1857**

TS: *Herophilus peregrinus* Loew, 1846.

- 124. *Mesembrius flaviceps* (Matsumura, 1905):** Thousand Ins. Japan, Add. 2: 104, pl.X X VI. fig. 14 (*Helophilus*). TL: "Honshu, Shikoku, Kyushu". 노랑배수중다리꽃등에  
*akakurensis* (Matsumura, 1916): Thousand Ins. Japan, Add. 2: 246, pl.X VII. fig. 22 (*Helophilus*).  
 TL: "Honshu (Akakura in the Prov. Shinano)".

Korean Records:

*Mesembrius flaviceps*; Peck 1988: 202 (Palearctic cat.); Ohara 1989: 792 (Japanese check.); ESK & KSAE 1994: 292 (Korean check.).

*Mesembrius flavipes*; Kim, CW & Nam 1982c: 174 (Seoul); Kim, JI et al. 1983: 208 (new Korean record); Kim, JI & Yoo 1987b: 518 (DMZ vicinities); Kim, JI 1995b: 145 (Byeonsan Peninsula).

Distribution: Russian Far East (Primorye Territory), Korea, Japan (Hokkaido, Honshu, Shikoku, Kyushu).

- 125. *Mesembrius niger* Shiraki, 1968:** Fauna jap. Syrphidae, 3: 225 (*Mesembrius*). TL: "Musashiseki, Tokyo". 검정배수중다리꽃등에

Korean Records:

*Mesembrius niger*; Peck 1988: 203 (Palearctic cat.); Ohara 1989: 792 (Japanese check.); ESK & KSAE 1994: 292 (Korean check.); Kim, JI et al. 1983: 208 (new Korean record).

Distribution: Korea, Japan (Honshu).

**Tribe Milesiini 알락긴꽃등에족**

**Genus *Blera* Billberg, 1820**

TS: *Musca fallax* Linnaeus, 1758.

- 126. *Blera japonica* (Shiraki, 1930):** Mem. Fac. Agric. Taihoku imp. Univ., 1(1): 60 (*Cynorrhina*). TL: "Japan (Iwate und Shinano)". 큰허리꽃등에

Korean Records:

*Blera japonica*; Kim, JI et al. 1983: 207 (new Korean record); Peck 1988: 205 (Palearctic cat.); Ohara 1989: 793 (Japanese check.); ESK & KSAE 1994: 291 (Korean check.); Han et al. 1998: 11 (Yonsei Wonju Campus).

*Cynorrhina japonica*; Park et al. 1993: 208 (Mt. Jiri).

Distribution: Russian Far East (Sakhalin, Kuril Is, Primorye Territory), Korea, Japan (Hokkaido, Honshu).

- 127. *Blera nitens* (Stackelberg, 1923):** Supplta. ent., 9: 22 (*Cynorrhina*). TL: "In Gubernio Tomskensi Sibiriae meridionalis, inter fl. Kysass et Abakan". 북방허리꽃등에 (신칭)  
*pallipes* (Stackelberg, 1928): Konowia, 7(3): 254 (*Cynorrhina*, as var. of *nitens*). TL: "distr. Irkutensis...; Korea. syst. fluminis Jalu, inter Tshan-pen et Tadin-pen" (Russia: Irkutsk; Korea).

Korean Records:

*Blera nitens*; Peck 1988: 205 (Palearctic cat.).

Distribution: Russia, Korea.

### Genus *Criorhina* Meigen, 1822

TS: *Syrphus asilicus* Fallén, 1816.

128. *Criorhina brevipila* Loew, 1871: Besch. europ. Dipt., 2: 235 (*Criorhina*). TL: "Irkutzk"

(E Siberia). 시베리아긴코꽃등에 (신칭)

*montivaga* (Violovitsh, 1973): Novye i maloizvestnye vidy fauny Sibiri, 7: 114 (*Criorhina*). TL:

Sakhalin, environs of Yuzhno-Sakhalinsk.

Korean Records:

*Criorhina brevipila*; Peck 1988: 207 (Palearctic cat.).

Distribution: Russia, Mongolia, Korea (?).

Remarks: Korean distribution of this species was indicated in the Palearctic catalog (Peck 1988) with a question mark.

129. *Criorhina trifasciata* Shiraki, 1930: Mem. Fac. Agric. Taihoku imp. Univ., 1(1): 56

(*Criorhina*). TL: Rantaizan, Formosa (Taiwan). 점박이긴코꽃등에

Korean Records:

*Criorhina trifasciata*; ESK & KSAE 1994: 291 (Korean check.).

*Criorhina trifasciatus*; Kim, JI 1980: 386 (Korean check.).

*Penthesilea trifasciatus*; Kim, JI 1974: 9 (new Korean record); Kim, JI 1975: 40 (Korean check.).

Distribution: Korea, Taiwan.

### Genus *Matsumyia* Shiraki, 1949

TS: *Priomerus jesoensis* Matsumura, 1911.

130. *Matsumyia jesoensis* Matsumura, 1911: J. Coll. Agric. Hokkaido imp. Univ., 4(1): 78

(*Priomerus*). TL: "Kusunnai" [=Sakhalin: Ilinskiy]. 에조벌꽃등에 (신칭)

Korean Records:

*Matsumyia jesoensis*; Kim, JI 1981: 353 (Sudong-myeon).

Distribution: Russian Far East (Sakhalin, Kunashir), Korea, Japan (Hokkaido, Honshu).

131. *Matsumyia nigrofacies* Shiraki, 1949: Insecta matsum., 17(1): 2 (*Matsumyia*). TL:

"Kamikochi, Nagano-Prefecture, and ... from Mt. Daisetsu, Hokkaido" (Japan). 뒤영벌꽃등에

Korean Records:

*Matsumyia nigrofacies*; Kim, JI 1980: 386 (Korean check.).

*Matsumyia nigrofacies*; ESK & KSAE 1994: 291 (Korean check.).

*Matsumyia nigrofacies*; Kim, JI & Kim, CW 1972: 11 (new Korean record); Kim, JI 1975: 40 (Korean check.).

Distribution: Russian Far East (Sakhalin, Kunashir), Korea, Japan (Hokkaido, Honshu).

**Genus *Milesia* Latreille, 1804**

TS: *Syrphus crabroniformis* Fabricius, 1775.

**132. *Milesia undulata* Vollenhoven, 1863:** Versl. Meded. K. Akad. wet. Amst., 15: 12 (*Milesia*).

TL: "Japan". 알락긴꽃등에

Korean Records:

*Milesia undulata*; Kim, JI 1974: 8 (new Korean record); Kim, JI 1975: 41 (Korean check.); Kim, JI 1980: 386 (Korean check.); ESK & KSAE 1994: 291 (Korean check.); Kim, JI 1996: 178 (Mt. Bangtae).

Distribution: Russian Far East (?Sakhalin), Korea, Japan (Hokkaido, Honshu, Shikoku, Kyushu).

**Genus *Narumyia* Shiraki, 1952**

TS: *Narumyia narumii* Shiraki, 1952.

**133. *Narumyia narumii* Shiraki, 1952:** Mushi, 23(1): 11 (*Narumyia*). TL: "at Aoni, Aomori Prefecture". 나루미꽃등에 (신칭)

Korean Records:

*Narumyia narumii*; Choo 1987: 118 (collected from peach and plum blossom).

Distribution: Korea, Japan (Honshu).

**Genus *Pterallastes* Loew, 1863**

TS: *Pterallastes thoracicus* Loew, 1863.

**134. *Pterallastes unicolor* (Shiraki, 1930):** Mem. Fac. Agric. Taihoku imp. Univ., 1(1): 200 (*Pseudozettedtia*). TL: "Japan-Hokkaido (Josankei, Sapporo), Honshu (Wakayama, Towada, Chuzenji)". 황가슴꽃등에

Korean Records:

*Pseudozettedtia unicolor*; Kim, JI 1972: 66 (MS thesis); Kim, CW & Kim, JI 1972a: 93 (Mujugucheondong); Kim, JI 1975: 41 (Korean check.).

*Pseudozettedtia unicolor*; Kim, CW 1971: 887 (redescrip.); Kim, JI 1981: 353 (Sudong-myeon); Kim, CW & Nam 1982b: 130 (Mts. Gyeong, Sogyeong & Gachilbong); Kim, JI & Chang 1987: 113 (Mt. Taebaek).

*Pseudozettedtia unicolor*; Kim, JI 1980: 388 (Korean check.).

*Pterallastes unicolor*; ESK & KSAE 1994: 291 (Korean check.); Kim, JI 1996: 178 (Mt. Bangtae); Kim, JI et al. 1994: 154 (Mt. Gyeong).

Distribution: Russian Far East (Kuril Is: Kunashir), Korea, Japan (Hokkaido, Honshu).

**Genus *Spilomyia* Meigen, 1803**

TS: *Musca diophthalma* Linnaeus, 1758.

**135. *Spilomyia matsumurai* Shiraki, 1968:** Fauna jap. Syrphidae, 3: 5 (*Spilomyia*).

TL: "Japan (Minomo, Sapporo, Josankei, Chuzenji)". 마쯔무라긴꽃등에

Korean Records:

*Spilomyia matsumurai*; Kim, JI 1980: 385 (Korean check.).

Distribution: Korea, Japan (Hokkaido, Honshu).

**136. *Spilomyia permagna* Stackelberg, 1958:** Ent. Obozr., 37(3): 763 (*Spilomyia*). TL:Kunashir, Alekhino, Lake Lagunnoe (Kunashir). 극동긴꽃등에, 한국곤충명집 (ESK & KSAE 1994)에  
는 "마쯔무라긴꽃등에"로 잘못 기록되어 있다.

Korean Records:

*Spilomyia permagna*; ESK & KSAE 1994: 291 (Korean check.).

Distribution: Russian Far East (Sakhalin, Kuril Is) to Korea.

**137. *Spilomyia suzukii* Matsumura, 1916:** Thousand Ins. Japan, Add. 2: 229, pl. X, fig. 9(*Spilomyia*). TL: "Honshu (Kyoto)". 스즈키긴꽃등에

Korean Records:

*Spilomyia suzukii*; Doi 1938a: 10 (Korean check.); ZSK 1968: 180 (Korean check.); Kim, CW  
1971: 885 (redescr.); Kim, JI 1972: 61 (MS thesis); Kim, JI 1975: 41 (Korean check.); Kim, CW  
& Nam 1982b: 130 (Gyeong, Sogyeong & Gachilbong); Kim, CW & Nam 1982c: 173 (Seoul);  
Kim, JI et al. 1994: 154 (Mt. Gyeong); ESK & KSAE 1994: 291 (Korean check.); Kim, JI 1995a:  
176 (Mt. Sobaek); Kim, JI 1996: 178 (Mt. Bangtae).

Distribution: Russian Far East (Primorye Territory, Kuril Is), Korea, Japan (Hokkaido, Honshu).

**Genus *Temnostoma* Le Peletier et Serville, 1828**TS: *Milesia bombylans* Fabricius, 1805.**138. *Temnostoma bombylans* (Fabricius, 1805):** Syst. antl.: 189 (*Milesia*). TL: "in Pyrenaeis"

[=Pyrénées Mts] (France). 배세줄꽃등에

*zetterstedti* (Fallén, 1816): Syrphici Sueciae: 8 (*Milesia*). TL: "ad Lårketorp Ostrogothiae et in  
Smolandia" [=prov. Östergötland: Lårketorp and prov. Småland] (Sweden).*nitobei* Matsumura, 1916: Thousand Ins. Japan, Add. 2: 199, pl. X VI, fig. 15 (*Temnostoma*). TL:  
"Hokkaido (Sapporo), Honshu (Aomori)" (Japan).*japonicum* Hull, 1944: Psyche, 51: 41 (*Temnostoma*). TL: "Nikko, Japan".

Korean Records:

*Temnostoma bombylans*; Doi 1938a: 10 (Korean check.); Kim, CW 1971: 886 (redescr.); Kim, JI  
1972: 60 (MS thesis); Kim, JI 1975: 40 (Korean check.); Kim, JI 1980: 386 (Korean check.); Peck  
1988: 216 (Palearctic cat.); Kim, CH et al. 1991: 107 (Mt. Jiri); ESK & KSAE 1994: 291  
(Korean check.); Han et al. 1998: 11 (Yonsei Wonju Campus).*Temnostoma bombylanus*; Kim, JI & Kim, JK 1996: 50 (Mts. Daem & Dutayon).*Temnostoma bombylans*; ZSK 1968: 180 (Korean check.).*Temnostoma nitobei*; Kim, JI et al. 1983: 206 (new Korean record); Kim, JI & Kim, JK 1996: 50

(Mts. Daiam & Dutayeon).

Distribution: Palaearctic Region.

**139. *Temnostoma frequense* Matsumura, 1931:** 6000 illustr. Ins. Jap. Empire: 339, fig. 40

(*Temnostoma*). TL: "Hokkaido, Honshu". 어리알락긴꽃등에

Korean Records:

*Temnostoma frequense*; Kim, JI 1972: 60 (MS thesis).

*Temnostoma frequense*; Doi 1938a: 10 (Korean check.); ZSK 1968: 180 (Korean check.); Kim, JI 1975: 41 (Korean check.); ESK & KSAE 1994: 291 (Korean check.).

Distribution: Korea, Japan.

**140. *Temnostoma vespiforme* Linnaeus, 1785:** Syst. Nat., Ed. 10, 1: 593 (*Musca*). TL:

"Europa". 말벌꽃등에

*sericomylaeforme* (Portschinsky, 1887): Trudy russk. ent. Obshch. [=Horae Soc. ent. ross.], 21(1-2): 8 (*Spilomyia*, as var. of *vespiforme*). TL: "circa Mohilew ad Boristhenem (Rossia occid.)" [=environs of Mohilev on Dnieper] (Ruissia).

*sibiricum* (Portschinsky, 1887): Trudy russk. ent. Obshch. [=Horae Soc. ent. ross.], 21(1-2): 7 (*Spilomyia*, as var. of *vespiforme*). TL: "Sibiria, Amur". [=environs of Mohilev on Dnieper] (Russia).

*vulgare* (Portschinsky, 1887): Trudy russk. ent. Obshch. [=Horae Soc. ent. ross.], 21(1-2): 7 (*Spilomyia*, as var. of *vespiforme*).

*jozankeanum* (Matsumura, 1916): Thousand Ins. Japan, Add. 2: 197, pl. X VI, fig. 18 (*Spilomyia*). TL: "Hokkaido (Sapporo)".

*strigosum* Sack, 1941: Arb. morph. taxon. Ent. Berl., 8(3): 191 (*Temnostoma*, as var. of *vespiforme*). TL: "Gaolinzsy" (NE China).

Korean Records:

*Temnostoma vespiforme*; Kim, JI & Kim, CW 1972: 10 (new Korean record); Kim, JI 1975: 41 (Korean check.); ESK & KSAE 1994: 291 (Korean check.).

*Temnostoma vespiformis*; Kim, JI 1980: 386 (Korean check.).

*Temnostoma vestiforma*; Kim, JI & Chang 1987: 113 (Mt. Taebaek).

Distribution: Holarctic Region.

**Genus *Syritta* Le Peletier et Serville, 1828**

TS: *Musca pipiens* Linnaeus, 1758.

**141. *Syritta orientalis* Macquart, 1982:** Sri Lanka, India [Madras], ?Java, ?Celebes; ?Amboina.

Dipt. exot. 2(2): 76 (*Syritta*). TL: Pondicherry, Madras, India. 도래마디가시꽃등에

?*lutescens* Doleschall, 1856; Natuurk. Tijdschr. Ned.-Indië 10: 410 (*Senogaster*). TL: Djokjokarta, Java.

?*amboinensis* Doleschall, 1858; Natuurk. Tijdschr. Ned.-Indië 17: 97 (*Syritta*). TL: Amboina, Moluccas.

?*illucida* Walker, 1860; J. Linn. Soc. Lond. 4: 121 (*Syritta*). TL: Makasar, Celebes.



## Korean Records:

*Syrpitta orientalis*; Kim, JI 1974: 8 (new Korean record); Kim, JI 1975: 41 (Korean check.); Kim, JI 1980: 386 (Korean check.); ESK & KSAE 1994: 291 (Korean check.).

Distribution: Oriental Region, Korea.

Remarks: Occurrence of this Oriental species in Korea needs to be more carefully confirmed.

## Tribe Xylotini 허리꽃등에족

Genus *Brachypalpus* Macquart, 1834

TS: *Brachypalpus tuberculatus* Macquart, 1834.

142. *Brachypalpus laphriformis* (Fallén, 1816): Syrphici Sveciae: 22 (*Syrphus*). TL:

“Esperöd...; in Lörketorp Ostrogothiae” (Sweden). 쌍점박이꽃등에  
*bimaculatus* (Macquart, 1829): Mém. Soc. Sci. Agric. Lille, 1827–1828: 282 and Ins. Dipt., 4: 134  
 (*Xylota*). TL: “Lestrem” (W Lille, France).  
*angustus* Egger, 1860: Verh. zool.-bot. Ges. Wien, 10: 665 (*Brachypalpus*). TL: “Austria”.  
*angustatus* Schiner. 1862: Fauna austr., Diptera, 1: 353 (*Brachypalpus*). TL: “Schneeberg”  
 (Austria).

## Korean Records:

*Brachypalpus bimaculatus*; Shiraki 1930: 62 (redescr.); ZSK 1968: 179 (Korean check.); Kim, CW 1971: 874 (redescr.); Kim, JI 1972: 64 (MS thesis); Kim, JI 1975: 41 (Korean check.); Kim, JI 1980: 386 (Korean check.); ESK & KSAE 1994: 291 (Korean check.).

*Brachypalpus laphriformis*; CFNM 1995: 477 (Jeju-do).

Distribution: Europe, Siberia, Korea.

Genus *Chalcosyrphus* Curran, 1925

TS: *Chalcomyia* (*Chalcosyrphus*) *atra* Curran, 1925.

143. *Chalcosyrphus* (*Xylotomima*) *longus* (Coquillett, 1898): Proc. U.S. natn. Mus., 21: 327 (*Xylota*). TL: not given (Japan). 긴허리꽃등에

## Korean Records:

*Chalcosyrphus longus*; ESK & KSAE 1994: 291 (Korean check.).

*Xylota longa*; Kim, JI 1980: 386 (Korean check.).

*Zelima longa*; Doi 1938a: 10 (Korean check.); ZSK 1968: 180 (Korean check.); Kim, CW 1971: 872 (redescr.); Kim, JI 1972: 63 (MS thesis); Kim, JI 1975: 41 (Korean check.); Nam & Kim, ML 1983: 133 (Mt. Jiri); Kim, CH et al. 1991: 107 (Mt. Jiri).

Distribution: Russian Far East (Kuril Is, Primorye Territory), Korea, Japan (Hokkaido, Honshu).

144. *Chalcosyrphus* (*Xylotomima*) *sapporoensis* (Shiraki, 1930): Mem. Fac. Agric. Taihoku imp. Univ., 1(1): 76 (*Zelima*). TL: “Japan (Sapporo) und ... aus Korea”. 홍다리꽃등에

## Korean Records:

- Chalcosyrphus sapporoensis*; Peck 1988: 223 (Palearctic cat.); ESK & KSAE 1994: 291 (Korean check.); Han et al. 1998: 11 (Yonsei Wonju Campus).
- Xylota sapporoensis*; Kim, JI 1980: 386 (Korean check.).
- Xylota sapporoensis*; Kim, JI 1981: 353 (Sudong-myeon); Kim, JI & Park 1984: 42 (anatomy).
- Zelima capporensis*; Kim, JI 1972: 63 (MS thesis).
- Zelima sapporoensis*; Matsumura 1931: 359 (redescr.); Park & Kim 1982: 40 (Mt. Jiri); Kim, CW & Nam 1982c: 173 (Seoul).
- Zelima sapporoensis*; ZSK 1968: 180 (Korean check.); Kim, CW 1971: 872 (redescr.); Kim, CH et al. 1991: 107 (Mt. Jiri); Park et al. 1993: 208 (Mt. Jiri).
- Zelima sapporoensis*; Kim, JI 1975: 41 (Korean check.).
- Distribution: Russian Far East (Khabarovsk and Primorye Territories, Kuril Is), Korea, Japan (Hokkaido).

### Genus *Xylota* Meigen, 1822

TS: *Musca sylvarum* Linnaeus, 1758.

#### 145. *Xylota abiens* Meigen, 1822: Syst. Besch., 3: 218 (*Xylota*). TL: not given (Europe).

청람색허리꽃등에

*subabiens* (Stackelberg, 1952): Ent. Obozr., 32: 326 (*Zelima*). TL: Leningrad region: Komarovo on the northern coast of Finland bay; Yugoslavia (Orshova).

Korean Records:

*Xylota abiens*; Kim, JI et al. 1994: 116 (Mt. Gwangdeok); ESK & KSAE 1994: 291 (Korean check.);

Kim, JI 1995b: 145 (Byeonsan Peninsula); Kim, JI 1996: 178 (Mt. Bangtae).

*Zelima abiens*; Kim, CW & Nam 1982b: 130 (Mts. Gyeong, Sogyeong & Gachilbong).

Distribution: Europe, Russian Far East, Korea.

#### 146. *Xylota coquillettii* Hervé-Bazin, 1914: Anns Soc. ent. Fr., 83: 409 (*Xylota*; new name for *X. cuprina* Coquillett, 1898, a junior primary homonym of *Xylota cuprina* Bigot, 1885). TL:

"Tokyo" (Japan). 루리허리꽃등에

*cuprina* Coquillett, 1898: Proc. U.S. natn. Mus., 21(1146): 327 (*Xylota*). TL: not given (Japan).

Korean Records:

*Xylota coquillettii*; Kim, JI 1980: 386 (Korean check.); Kim, JI & Park 1984: 43 (anatomy); Kim, JI & Yoo 1987b: 518 (DMZ vicinities); Kim, CH et al. 1991: 107 (Mt. Jiri); Kim, JI et al. 1991: 187 (Mt. Sockri); Park et al. 1993: 208 (Mt. Jiri); Kim, JI et al. 1994: 154 (Mt. Gyeong); ESK & KSAE 1994: 291 (Korean check.); Kim, JI 1995a: 176 (Mt. Sobaek); Kim, JI 1996: 178 (Mt. Bangtae).

*Zelima coquillettii*; Doi 1938a: 11 (Korean check.); ZSK 1968: 180 (Korean check.); Kim, CW et al. 1971: 57 (Is. Ulreung); Kim, CW 1971: 873 (redescr.); Kim, JI 1972: 61 (MS thesis); Kim, CW & Kim, JI 1972a: 92 (Mujugucheondong); Kim, JI 1975: 41 (Korean check.); Yoon & Nam 1980: 155 (Mts. Chilgab & Gyeryong); Kim, CW 1980: 296 (distr. map); Lee & Kwon 1981: 160 (Is. Ulreung & Dog); Kim, CW & Nam 1982a: 290 (Seoul); Kim, CW & Nam 1982b: 130 (Mts. Gyeong, Sogyeong & Gachilbong); Kim, CW & Nam 1982c: 173 (Seoul).

Distribution: W. Siberia (Altai, Sayan, Tuba), Russian Far East (Khabarovsk and Primorye Territories, Sakhalin, Kuril Is), Korea, Japan, Oriental Region.

147. *Xylota frontalis* (Shiraki et Edashige, 1953): Trans. Shikoku ent. Soc., 3(5-6): 116 (*Zelima*). TL: "Omogo Valley, Ehime Pref." 알락허리꽃등에

Korean Records:

*Xylota frontalis*; Kim, JI 1980: 386 (Korean check.); Kim, JI et al. 1991: 187 (Mt. Sockri); ESK & KSAE 1994: 291 (Korean check.); Kim, JI 1995a: 176 (Mt. Sobaek); Han et al. 1998: 11 (Yonsei Wonju Campus).

*Zelima fromtalis*; Kim, CH et al. 1991: 107 (Mt. Jiri).

*Zelima frontalis*; Kim, JI & Kim, CW 1972: 11 (new Korean record); Kim, JI 1972: 62 (MS thesis); Kim, CW & Kim, JI 1972a: 92 (Mujugucheondong); Kim, CW & Kim, JI 1974: 122 (Mt. Naejang); Kim, JI 1975: 41 (Korean check.); Kim, CW 1980: 297 (distr. map).

Distribution: Korea, Japan (Shikoku).

148. *Xylota ignava* (Panzer, [1798]): Faunae insect. germ., Fasc. 60: 4 (*Syrphus*).

TL: "Norimbergae" [=Nürnberg]. 노랑허리꽃등에

*basalis* Matsumura, 1911: J. Coll. Agric. Hokkaido imp. Univ., 4(1): 74 (*Xylota*), TL: "Solowiyofka, Kusunnai" [= Sakhalin: near Korsakov, Ilinskiy].

*inermis* Becker, 1921: Mitt. zool. Mus. Berl., 10: 86 (*Xylota*). TL: "Transbaikal, Tschita" (E Siberia).

Korean Records:

*Xylota ignava*; Kim, JI 1980: 386 (Korean check.); Peck 1988: 225 (Palearctic cat.); ESK & KSAE 1994: 291 (Korean check.).

*Zelima ignava*; Doi 1938a: 11 (Korean check.); ZSK 1968: 180 (Korean check.); Kim, CW 1971: 873 (redescr.); Kim, JI 1972: 62 (MS thesis); Kim, JI 1975: 41 (Korean check.).

Distribution: Palearctic Region.

### Subfamily Microdontinae 개미꽃등에아과

#### Genus *Microdon* Meigen, 1803

TS: *Musca mutabilis* Linnaeus, 1785.

149. *Microdon auricomus nigripes* Shiraki: Mem. Fac. Agric. Taihoku imp. Univ., 1(1): 22 (*Microdon*, as var. of *auricomus*). TL: "von Koyasan...und...aus Korea". 개미꽃등에

Korean Records:

*Merodon equestris*; Nam 1996: 306 (color photo: misidentification).

*Microdon auricomus*; Doi 1938a: 9 (Korean check.); ZSK 1968: 180 (Korean check.); Shiraki 1968a: 5 (redescr.); Kim, CW 1971: 875 (redescr.); Kim, JI 1972: 86 (MS thesis); Kim, CW & Kim, JI 1972a: 92 (Mujugucheondong); Kim, CW et al. 1974: 247 (DMZ); Kim, JI 1975: 41 (Korean check.); Kim, JI 1980: 383 (Korean check.); Kim, CW & Nam 1982c: 173 (Seoul); Kim, JI & Park 1984: 42 (anatomy).

*Microdon auricomus nigripes*; Peck 1988: 227 (Palearctic cat.); Ohara 1989: 795 (Japanese check.); ESK & KSAE 1994: 292 (Korean check.); Han et al. 1998: 11 (Yonsei Wonju Campus).

Distribution: Korea, Japan.

**150. *Microdon japonicus* Yano 1915:** Konchu-Sekai (Insect Wld), 19(1): 5 (*Microdon*). TL:

Japan (Komaba, Harima, Shinano). 좀개미꽃등에

*jezoensis* Matsumura, 1916: Thousand Ins. Japan, Add. 2: 255, pl. X VII, fig. 30 (*Microdon*). TL: "Hokkaido (Sapporo)".

Korean Records:

*Microdon japonica*; Doi 1938a: 9 (Korean check.); ZSK 1968: 180 (Korean check.).

*Microdon japonicus*; Kim, CW 1971: 875 (redescrip.); Kim, JI 1972: 87 (MS thesis); Kim, CW & Kim, JI 1972a: 93 (Mujugucheondong); Kim, CW et al. 1974: 247 (DMZ); Kim, JI 1975: 42 (Korean check.); Kim, JI 1980: 383 (Korean check.); Kim, JI & Park 1984: 43 (anatomy); ESK & KSAE 1994: 292 (Korean check.); Kim, JI et al. 1994: 153 (Mt. Gyeonggi); Han et al. 1998: 11 (Yonsei Wonju Campus).

*Myrcn japonicus*; Kim, CH et al. 1991: 106 (Mt. Jiri).

Distribution: Korea, Japan.

**151. *Microdon oitanus* Shiraki 1930:** Mem. Fac. Agric. Taihoku imp. Univ., 1(1): 18 (*Microdon*).

TL: "Japan (Oita)". 왕개미꽃등에

Korean Records:

*Microdon oitamus*; Kim, JI 1972: 87 (MS thesis); Kim, JI 1980: 383 (Korean check.); Kim, JI & Park 1984: 42 (anatomy); Kim, JI & Park 1991: 226 (Daechung lake vicinities).

*Microdon oitanus*; Kim, JI & Kim, CW 1972: 12 (new Korean record); Kim, JI 1975: 42 (Korean check.); Kim, CW 1980: 284 (distr. map); Kim, CH et al. 1991: 106 (Mt. Jiri); Kim, JI et al. 1994: 116 (Mt. Gwangdeok); ESK & KSAE 1994: 292 (Korean check.).

Distribution: Korea, Japan.

## ACKNOWLEDGEMENTS

We thank Dr. K. T. Park (Kangwon National Univ.) for his encouragement during the course of this study. We also thank Dr. K. E. Ro and Mr. S. K. Kim (Yonsei Univ.) for helping us to maintain our syrphid collection and database.

## REFERENCES

We only included the references listed under "Korean Records". Peck (1988) and Knutson et al. (1975) should be referred for the original and subsequent descriptions for the nominal species.

- Bankowska, R. 1964. Studien über die paläarktischen Arten der Gattung *Sphaerophoria* St. Farg. et. Serv. (Diptera, Syrphidae). *Annls zool., Warsz.* 22(15): 285-353.  
Jeju Folklore and Natural History Museum (CFNM). 1995. *Insects of Quelpart Island*. (in Korean).

- Cho, P.S. 1955. The fauna of Dagelet Island (Ulung-do). *Bull. Sungkyunkwan Univ.* 2: 178-266. (in Korean).
- Cho, P.S. 1963. Insects of the Isl. Quelpart. *Hum. and Nat. Sci., Korea Univ.* 6: 159-243. (in Korean).
- Cho, P.S. 1965. Beitrage zur Kenntnis der Insekten-Fauna Insel Dagelet (Ulung-do). *Comm. Theses of 60th Anniv. (Natural Sci.)*, Korea Univ.: 157-205. (in Korean).
- Choo, H.Y., M.K. Cho, and K.S. Woo. 1987. Insect visitors to peach and plum blossoms. *Korean J. Pl. Prot.* 26(3): 117-122. (in Korean).
- Doi, H. 1937. Insects list on Isl. Deukjeuk-do. *J. Chosen Nat. Hist. Soc.* 22: 62. (in Japanese).
- Doi, H. 1938a. A List of the Diptera of Korea. *Bull. Sci. Mus. Keizyo, Korea* 72(6): 5-18. (in Japanese).
- Doi, H. 1938b. Insects of Gaima-plateau, North Korea, in Spring. *Mushi* 11(1): 87-98. (in Japanese).
- Doi, H. 1939. On the insects of Isl. Deokzeok-do on the Yellow Sea. *Bull. Tea. Soc. Nat. Hist. Korea* 3: 40-44. (in Japanese).
- Entomological Society of Korea (ESK) and Korean Society of Applied Entomology (KSAE). 1994. *Check list of Insects from Korea*. Kon-Kuk University Press, Seoul, Korea. (in Korean).
- For. Exp. Stat. Gov.-Gen. Chosen (FESGC). 1932. List of insects from Gwangneung Experimental Forest, Konggi-do.: 114-115. (in Japanese).
- Han, H.Y., D.S. Choi, and H.W. Byun. 1998. A faunistic survey of Diptera (Insecta) in Mt. Paegun: Syrphidae of the Wonju Campus, Yonsei University. *J. Inst. Basic Sci., Yonsei Univ.* 6: 9-16.
- Hokuryukan Co. 1932. *Iconographia Insectorum Japonicorum*. Tokyo, Japan.: 52-110. (in Japanese).
- Hokuryukan Co. 1956. *Iconographia Insectorum Japonicorum*, Tokyo, Japan.: 1610-1648. (in Japanese).
- Hokuryukan Co. 1965. *Iconographia Insectorum Japonicorum, Colore Naturali Edita* (Vol. III). Tokyo, Japan: 207-218, pls 104-109. (in Japanese).
- Hyun, J.S. and K.S. Woo. 1969. Insects fauna of Mt. Jiri (I). *Bull. Seoul Natn. Univ. Forests* 6: 157-202 (in Korean).
- Ichigawa, M. 1906. Insects of Isl. Quelpart. *Hakubutsu no Tomo.* 6(33): 183-186. (in Japanese).
- Ito, S., T. Okutani, and I. Hiura. 1993. *Colored Illustrations of the Insects of Japan (Vol. II)*. Hoikusha publishing Co., Ltd., Osaka, Japan: 252-256, pls 49-50. (in Japanese).
- Kim, C.H. 1961. A list of insects of Mt. Jiri (I). *Res. Chinju Agr. Coll.* 1: 1-33. (in Korean).
- Kim, C.H., J.S. Park, S.H. Choi, W.K. Paik, and K.S. Ha. 1991. Insect faunal survey report of Mt. Jiri. Jayonhaksupwon, Kyongsangnam-do, Korea: 122 pp. (in Korean).
- Kim, C.W. 1971. Family 26. Syrphidae.: 827-887, pls 47-58. In Kim, C.W. et al. [co-authors], *Illustrated Encyclopedia of Fauna and Flora of Korea*. Vol. 12, Insecta (IV). Ministry of Education, Korea. (in Korean).
- Kim, C.W. 1980. *Distribution atlas of insects of Korea*. Hymenoptera and Diptera (Series 3). Korea University Press, Seoul, Korea. (in Korean).
- Kim, C.W. and J.I. Kim. 1971. Report on the preliminary survey of Mt. Odae and Sohgun-gang, Chung-hak-dong (Insects). *Rep. KACN* 4: 139-173. (in Korean).
- Kim, C.W. and J.I. Kim. 1972a. Insect fauna of Gucheondong, Muju-gun. *Rep. KACN* 5: 65-101. (in Korean).
- Kim, C.W. and J.I. Kim. 1972b. Insect fauna of Mt. Daedun, Haenam-gun. *Rep. KACN* 6: 189-200. (in Korean).
- Kim, C.W. and J.I. Kim. 1974. Insect fauna of the natural park, Mt. Naejangsan in summer season. *Rep. KACN* 8: 95-126. (in Korean).
- Kim, C.W. J.I. Kim, J.K. Oh, Y.T. Noh, and Y.H. Shin. 1974. Faunistic study of Insects near the DMZ. *Rep.*

- KACN 7: 182-257. (in Korean).
- Kim, C.W. J.I. Kim, and J.H. Reu. 1976. A report on the scientific survey of Mt. Chi-ak, Insecta. *Rep. KACN* 9: 84-85, 91-113. (in Korean).
- Kim, C.W., C.E. Lee, H.C. Park, S.H. Nam, and Y.J. Kwon. 1985. Insect fauna of Mt. Chuwang in summer season. *Rep. KACN* 23: 93-110. (in Korean).
- Kim, C.W. and S.H. Nam. 1977. Insect fauna of Mt. Jogye in Summer season. *Rep. KACN* 11: 119-140. (in Korean).
- Kim, C.W. and S.H. Nam. 1978. Insect fauna of Imgye-myeon area in summer season. *Rep. KACN* 13: 125-142. (in Korean).
- Kim, C.W. and S.H. Nam. 1982a. Changes in insect fauna due to urbanization of Seoul city. *Rep. KACN* 4: 249-296. (in Korean).
- Kim, C.W. and S.H. Nam. 1982b. Insect fauna in the areas of Mts. Gyeong, Sogyeong and Gachilbong in summer season. *Rep. KACN* 20: 119-137. (in Korean).
- Kim, C.W. and S.H. Nam. 1982c. Insect Fauna of Seoul City Area. *Sci. and Tech. Korea Univ.* 23: 125-176. (in Korean).
- Kim, C.W. and S.H. Nam. 1984. Insect fauna in the area of Mt. Cheombong in Summer season. *Rep. KACN* 22: 83-93. (in Korean).
- Kim, C.W. and S.H. Nam. 1985. Insect fauna of Mt. Paegun Pochon-gun, Kyonggi-do. *Rep. Kyonggi Branch KACN*: 95-107. (in Korean).
- Kim, C.W., Y.H. Shin, and J.I. Kim. 1971. Report on the scientific survey of Isl. Woolung-do (Insecta). *Rep. KACN* 3: 47-62. (in Korean).
- Kim, H.K. 1958. Insect fauna in Isl. Dokchok-do (2). *Korean J. Appl. Zool.* 13(1): 87-102. (in Korean).
- Kim, J.I. 1972. Syrphidae in Korea. *Master's thesis, Korea University.* 97 pp. (in Korean).
- Kim, J.I. 1974. On the four unrecorded Syrphidae from Korea (Diptera). *Korean J. Entomol.* 4(1): 8-9.
- Kim, J.I. 1975. A list of Syrphidae (Diptera) from Korea. *Korean J. Entomol.* 5(1): 38-42. (in Korean).
- Kim, J.I. 1980. The historical review and the tentative list of the Korean Syrphidae. *J. Sungshin Univ.* 13: 365-389. (in Korean).
- Kim, J.I. 1981. The faunistic study on the insects from Sudong-myeon, Namyangju-gun, Gyeonggi-do, Korea. *Korean Cen. Coun. Nat. Preserv.* 3: 329-367. (in Korean).
- Kim, J.I. 1995a. Coleoptera and Diptera (Insecta) from Mt. Sobaek. *Rep. KACN* 33: 157-179. (in Korean).
- Kim, J.I. 1995b. Fauna of Coleoptera and Diptera (Insecta) from Pyonsan Peninsula National Park. *Rep. KACN* 34: 129-145. (in Korean).
- Kim, J.I. 1996. Insect fauna of Coleoptera and Diptera from Mt. Pangtae in summer season. *Rep. KACN* 35: 163-179. (in Korean).
- Kim, J.I. and K.S. Chang. 1982a. On the Summer seasonal insect from the Deogjeog Archipelago. *Report on the Survey of Natural Environment in Korea*, (1): 131-164. Korean Cen. Coun. Nat. Preserv. (in Korean).
- Kim, J.I. and K.S. Chang. 1982b. On the Summer seasonal insect from the group of Soan Island, Wando-gun. *Report on the Survey of Natural Environment in Korea*, (2): 161-184. Korean Cen. Coun. Nat. Preserv. (in Korean).
- Kim, J.I. and K.S. Chang. 1984. Insect fauna from Isl. Komun, Yochon-gun Chollanam-do, in Summer season. *Report on the Survey of Natural Environment in Korea*, (4): 161-180. Korean Cen. Coun. Nat. Preserv. (in Korean).
- Kim, J.I. and K.S. Chang. 1987. Insect fauna of the Mt. Taebaek in Korea. *Rep. KACN* 25: 91-120. (in

Korean).

- Kim, J.I., B.J. Kim, O.K. Lee, and H.C. Park. 1991. Faunistic study on the insect from Mt. Songni. *Rep. KACN* 29: 163–193. (in Korean).
- Kim, J.I. and C.W. Kim. 1972. On the 17 unrecorded Syrphidae (Dipt.) from Korea. *Korean J. Entomol.* 2(1): 7–12. (in Korean).
- Kim, J.I. and J.K. Kim. 1996. On the Insect fauna of Mt. Daiam and Dutayeon – Coleoptera, Hymenoptera, Diptera. *Nature Conservation* (94): 43–51. (in Korean).
- Kim, J.I., E.J. Lee, and S.Y. Kim. 1994. Insect fauna from the Mt. Gyeonggang Kangwon-do, Korea. '93 *Survey Report on Natural Environment*: 135–159. (in Korean).
- Kim, J.I. and J.W. Lee. 1980. The insect fauna of the islands from Sinan-Gun in the summer season. *Rep. KACN* 16: 79–87. (in Korean).
- Kim, J.I. and O.J. Lee. 1989. Insect fauna from the group of Isl. Anma-do, Jeonra-namdo, Korea, in August. *Report on the Survey of Natural Environment in Korea*, (9): 165–187. Korean Cen. Coun. Nat. Preserv. (in Korean).
- Kim, J.I. and H.C. Park. 1991. A Faunistic study of Terrestrial Insects in the Daechung Lake. 215–236. (in Korean).
- Kim, J.I. and H.K. Park. 1984. Taxonomical study on the Syrphidae (Diptera) from the anatomical characters of the digestive organ. *J. Basic Science* 1: 41–49. (in Korean).
- Kim, J.I. and H.K. Park, and C.W. Kim. 1983. On the 9 unrecorded Syrphidae (Insecta, Diptera) from Korea. *Korean J. of Zoology* 26(3): 203–209. (in Korean).
- Kim, J.I., J.M. Park, S.Y. Kim, and H.S. Choi. 1994. Insects fauna for Coleoptera, Hymenoptera and Diptera, in Mt. Kwangdok. '93 *Survey Report on Natural Environment*: 99–116. (in Korean).
- Kim, J.I. and H.J. Yoo. 1987a. Study on the insects fauna and its change (succession) from near the DMZ of the province Kyonggi-do, Korea. *Rep. Environm. Stud. DMZ. Korea, Kyonggi-do*: 489–528. (in Korean).
- Kim, J.I. and H.J. Yoo. 1987b. Summer seasonal fauna of the insect from Isl. Paengnyong of the province Kyonggi, Korea. *Rep. Surv. Nat. Environm. Korea* 7: 213–235. (in Korean).
- Knutson, L.V., F.C. Thompson, and J.R. Vockeroth. 1975. Family Syrphidae. 307–374, In Delfinado, M.D. and D.E. Hardy (eds.), *A Catalog of the Diptera of the Oriental Region* (Volume 2). The University press of Hawaii.
- Ku, K. 1968. Insects of Mt. Myung-ji (cont'd). *Kor. J. Zool.* 11(2): 69–71. (in Korean).
- Kwon, Y.J., E.Y. Huh, and S.J. Suh. 1997. Industrial Useful Insects from Korea. *Ins. Koreana*, Suppl. 7: 1–48. (in Korean).
- Lee, C.E. and Y.J. Kwon. 1981. On the insect fauna of Isl. Ulreung and Dogdo in Korea. *Rep. KACN* 19: 139–179. (in Korean).
- Lee, H.P. and G.S. Ko. 1989. Insect fauna in the Isl. Oeyon in Summer. *Report on the Survey of Natural Environment in Korea*, (8): 195–220. Korean Cen. Coun. Nat. Preserv. (in Korean).
- Maruta, S. 1929. Survey of nocturnal flying insects of Korea. *Bull. For. Exp. Stat. Gov.-Gen. Chosen* 4(6): 360. (in Japanese).
- Maruta, S. 1931. Survey of nocturnal flying insects of Korea. *Bull. Agr. Exp. Stat. Gov.-Gen. Chosen* 4(6): 48. (in Japanese).
- Masaki, J. 1934. A list of insect of the Isl. Dagelet. *Ins. World.* 38: 401–405. (in Japanese).
- Masaki, J. 1936. On the insect fauna of various Islands of Korea (I). *Kontyû* 10(5): 251–275. (in Japanese).
- Matsumura, S. 1931. *6000 Illustrated insect of Japan-Empire*. (in Japanese).

- Matsumura, S. and J. Adachi. 1917a. Synopsis of the Economic Syrphidae of Japan (II). *Ent. Mag. Kyoto. Japan* 2(4): 133-156.
- Matsumura, S. and J. Adachi. 1917b. Synopsis of the Economic Syrphidae of Japan (III). *Ent. Mag. Kyoto. Japan* 2(6): 14-43.
- Morita, M. 1935. Discovery of *Imatisma dimorpha* Shiraki in Korea. *Ins. World* 3(21): 527. (in Japanese).
- Nagaoka, N. 1938. Insect fauna of Mt. Myoko in Western Korea. *Ins. World*. 6(46): 23-29. (in Japanese).
- Nagaoka, N. 1940. Insect fauna of Mt. Myoko in western Korea (part II). *Ins. World*. 8(77): 467-487. (in Japanese).
- Nagaoka, N. 1942. Insect fauna of Mt. Myoko in western Korea (Last report). *Ins. World*. 10(96): 95-97. (in Japanese).
- Nakane, T., J. Aoki, and R. Ishikawa. 1984. *Common Insect of Japan in Color* (Vol. 2). Hoikusha Publishing Co., Ltd., Osaka, Japan. (in Japanese).
- Nam, S.H. 1996. *The Insects of Korea in Color*. Kyo-Hak Publishing Co., Ltd., Seoul, Korea. (in Korean).
- Nam, S.H. and M.L. Kim. 1983. On the relation between the insects and the forest types of Piagol valley in Mt. Jiri. *Rep. KACN* 21: 123-136. (in Korean).
- Ohara, K. 1989. Syrphidae.: 783-795. In Sugi, S. et al. [eds.], *A Check List of Japanese Insects* (II). (in Japanese).
- Okada, H. 1941. Order Diptera from Ryukyu Islands. *Bull. Japanese Biogeography* 3(3): 262. (in Japanese).
- Okamoto, H. 1924. The insect fauna of Quelpart Island (Saishiu). *Bull. Arg. Exp. Gov. Gen. Chosen* 1(2): 47-233.
- Okuno, T. 1967. On the Syrphid larvae attacking the aphids in Japan (Diptera). *Mushi* 41(10): 123-141.
- Park, J.S. and H.W. Cho. 1986. Insect fauna in the areas of Mt. Paegun, Mt. Kipaeg and Mt. Hwangsok in summer season. *Rep. KACN* 24: 123-138. (in Korean).
- Park, J.S. and J.K. Kim. 1982. Insect fauna of Cheoneonsa area of Mt. Jiri. *Nature and Life* 12(1): 31-43. (in Korean).
- Park, J.S. D.S. Ku, and K.D. Han. 1993. Faunistic study on the insect from Hamyang-gun and Paemsagol area of Mt. Chiri. *Rep. KACN* 31: 153-218. (in Korean).
- Peck, L.V. 1988. Family Syrphidae.: 11-229, In So s, A. and L. Papp (eds.), *Catalogue of Palaearctic Diptera* (Vol. 8). Elsevier Science Pub., Netherlands / Academiai Kiado, Hungary.
- Ra, C.H., S.K. Paik, and Y. K. Cho. 1987. Insect fauna of Isl. Huksan in Summer. In Report on the survey of natural environment in Korea. *Korean Cen. Coun. Nat. Preserv.* 6: 197-216. (in Korean).
- Sack, P. 1928-1932. 31. Syrphidae. In Lindner, E. (ed.), *Die Fliegen der paläarktischen Region*. Band IV/6: 1-451, Taf. I-XVIII.
- Seok, D.M. 1970. *The Insect Fauna of the Isl. Quelpart*. Bojinjae, Seoul. 186 pp. (in Korean).
- Shiraki, T. 1930. Die Syrphiden des Japanischen Kaiserreichs, mit Berücksichtigung benachbarter Gebiete. *Mem. Fac. Agric. Taihoku imp. Univ.* 1(1): 1-446.
- Shiraki, T. 1968a. *Fauna Japonica, Syrphidae (Insecta, Diptera)* II. Biogeographical Society of Japan: 243pp.
- Shiraki, T. 1968b. *Fauna Japonica, Syrphidae (Insecta, Diptera)* III. Biogeographical Society of Japan: 272pp.
- Vockeroth, J.R. 1992. The flower flies of the subfamily Syrphinae of Canada, Alaska, and Greenland. *The Insects and Arachnids of Canada*, Part 18. Agriculture Canada: 456 pp.
- Yoon, I.B. and S.H. Nam. 1979. Insect fauna of remote islands from Isl. Geoje in summer season. *Rep. KACN* 14: 75-89. (in Korean).
- Yoon, I.B. and S.H. Nam. 1980. Insect fauna of Mts. Chilgab and Gyeryong. *Rep. KACN* 17: 129-158. (in Korean).



- Yoon, I.B., H.C. Park, K.D. Han, and C.S. Kim. 1990. A faunistic study of terrestrial insects in the Kayasan National Park. *Rep. KACN* 28: 99-128. (in Korean).
- Yoon, I.B., H.C. Park, S.H. Lee, and C.K. Kim. 1989. Summer insect fauna of Mt. Wolch'ul. *Rep. KACN* 17: 135-146. (in Korean).
- Zoological Society of Korea (ZSK). 1968. Syrphidae. 178-180, *In Nomina Animalium Koreanorum*, (2) Insecta. (in Korean).

## APPENDIX 1. INDEX TO GENERIC AND SPECIFIC NAMES

(\*Species number)

- abbreviata* Shiraki, *Cheilosia*, 70\*  
*abbreviatus* (Kanervo), *Metasyrphus*, 28  
*abdominalis* (Shiraki et Edashige), *Pipiza*, 62  
*abiens* Meigen, *Xylota*, 145  
*aenea* (Fabricius), *Callicera*, 84  
*aeneus* (Scopoli), *Eristalinus*, 105  
*aeneus* Macquart, *Eumerus*, 100  
*aeneus* Meigen, *Paragus*, 59  
*aesepus* (Walker), *Eristalinus*, 106  
*akakurensis* (Matsumura), *Mesembrius*, 124  
*akakurensis* Matsumura, *Syrphus*, 41  
*albifrons* (Wiedemann in Meigen), *Paragus*, 61  
*albostrigatus* (Fallén), *Dasysyrphus*, 5  
*algius* (Macquart in Lucas), *Metasyrphus*, 25  
*Allobaccha* Curran, 43  
*Allograpta* Osten Sacken, 1  
*alneti* (Fallén), *Didea*, 8  
*alpina* Strobl, *Eristalis*, 112  
*alternatus* (Schränk), *Episyrphus*, 17  
*ambiguus* (Fallén), *Platycheirus*, 55  
*amboinensis* Doleschall, *Syrphus*, 141  
*analis* (Macquart in Webb and Berthelot), *Paragus*, 59  
*analis* (Shiraki), *Mallota*, 118  
*andalusiaca* Strobl, *Episyrphus*, 17  
*angustatoides* Kanervo, *Melanostoma*, 52  
*angustatus* Schiner, *Brachypalpus*, 142  
*angustus* Egger, *Brachypalpus*, 142  
*annulatum* Loew, *Chrysotoxum*, 46  
*annulatus* (Zetterstedt), *Parasyrphus*, 29  
*apicalis* (Loew), *Allobaccha*, 43  
*apicalis* Matsumura, *Rhingia*, 83  
*arbustorum* (Linnaeus), *Eristalis*, 109  
*Asarkina* Macquart, 2–3  
*asiliformis* (Fabricius), *Leucozona*, 21  
*aterrima* (Sack), *Cheilosia*, 71  
*aurata* (Rossi), *Callicera*, 84  
*auricomus nigripes* Shiraki, *Microdon*, 149  
*austriaca* Meigen, *Pipiza*, 63  
*azureus* (Szilády), *Metasyrphus*, 27  
*Baccha* Fabricius, 44  
*balteatus* (de Geer), *Episyrphus*, 17  
*basalis* Matsumura, *Xylota*, 148  
*bengalensis* Macquart, *Sphaerophoria*, 31  
*berber* (Bigot), *Metasyrphus*, 25  
*beringi* Violenovitch, *Syrphus*, 39  
*Betasyrphus* Matsumura, 4  
*bicolor* Shiraki, *Pseuderistalis*, 114  
*bifasciatus* Macquart, *Paragus*, 61  
*biglumis* (Matsumura), *Pipizella*, 67  
*bilineatus* (Matsumura), *Dasysyrphus*, 6  
*bimaculatus* (Macquart), *Brachypalpus*, 142  
*bipunctata* Matsumura, *Stenopipiza*, 68  
*bipunctatum* (Müller), *Chrysotoxum*, 46  
*bipunctatus* Mik, *Doros*, 12  
*bisinuatus* (Palma), *Metasyrphus*, 28  
*blandus* (Harris), *Syrphus*, 39  
*Blera* Billberg, 126–127  
*bombiformis* (Matsumura), *Cheilosia*, 72  
*bombylans* (Fabricius), *Temnostoma*, 138  
*Brachypalpus* Macquart, 142  
*brevicinctus* Kanervo, *Syrphus*, 39  
*brevicornis* Shiraki, *Psilota*, 103  
*brevipila* Loew, *Criorhina*, 128  
*brevipila* Portschinsky, *Volucella*, 86  
*bucculatus* (Rondani), *Metasyrphus*, 27  
*bulborum* Rondani, *Merodon*, 101  
*bulgarica* Szilády, *Eristalis*, 109  
*calceolata* Macquart, *Sphaerophoria*, 37  
*Callicera* Panzer, 84  
*campestris* Matsumura, *Syrphus*, 41  
*campestris* Meigen, *Eristalis*, 112  
*candidus* (Matsumura), *Syrphus*, 41  
*carinatum* Matsumura, *Chrysotoxum*, 48  
*carinthiacus* (Latzel), *Dasysyrphus*, 5  
*cerealis* Fabricius, *Eristalis*, 110  
*Chalcosyrphus* Curran, 143–144  
*Cheilosia* Meigen, 70–79  
*chongjini* Bankowska, *Sphaerophoria*, 32  
*Chrysotoxum* Meigen, 45–50  
*chujenjianus* Matsumura, *Syrphus*, 41  
*cinctella* (Zetterstedt), *Meliscaeva*, 23  
*cingulata* (Vollenhoven), *Phytomia*, 113  
*claripes* Santos Abreu, *Eristalis*, 112  
*clunipes* (Fallén), *Sphegina*, 94  
*coarctatus* (Panzer), *Doros*, 12  
*comtus* (Harris), *Xanthandrus*, 54  
*concinus* (Wiedemann in Meigen), *Paragus*, 61  
*concolor* (Walker), *Melanostoma*, 52  
*confinis* (Zetterstedt), *Syrphus*, 41  
*confrater* (Wiedemann), *Metasyrphus*, 24  
*confusus* (Egger), *Dasysyrphus*, 5  
*conocephus* Zeller, *Doros*, 12  
*conopseus* (Fabricius), *Doros*, 12  
*conspicuous* Matsumura, *Syrphus*, 40  
*constans* (Wiedemann in Meigen), *Merodon*, 101  
*contigua* Macquart, *Sphaerophoria*, 33  
*coquilletti* (van der Goot), *Dideoides*, 10  
*coquilletti* Hervé-Bazin, *Xylota*, 146  
*coreana* (Enderlein), *Mallota*, 121  
*coreana* Shiraki, *Volucella*, 85  
*coreanum* Shiraki, *Chrysotoxum*, 45  
*coreanum* Shiraki, *Xanthogramma*, 42  
*coreanus* Shiraki, *Paragus*, 56  
*corollae* (Fabricius), *Metasyrphus*, 25  
*coronatus* (Rondani), *Dasysyrphus*, 5  
*crenatus* (Macquart), *Metasyrphus*, 25

- Criorhina* Meigen, 128–129  
*cuprea* (Scopoli), *Ferdinandea*, 80  
*cuprina* Coquillett, *Xylota*, 146  
*cylindricus* Say, *Sphaerophoria*, 33  
*Dasysyrphus* Enderlein, 5–7  
*datamus* (Walker), *Phytomia*, 113  
*deficiens* Szilády, *Melanostoma*, 52  
*deflagrata* (Preyssler), *Eristalis*, 109  
*destillatorius* Mik, *Doros*, 12  
*Didea* Macquart, 8–9  
*Dideoides* Brunetti, 10–11  
*differens* Frey, *Leucozona*, 21  
*dilatatum* Szilády, *Melanostoma*, 52  
*diminuta* (Matsumura), *Sphaerophoria*, 33  
*dimorpha* (Shiraki), *Mallota*, 119  
*disjunctus* (Macquart), *Metasyrphus*, 25  
*dispar* Schummel, *Paragus*, 59  
*djakonovi* Stackelberg, *Eumerus*, 96  
*Doros* Meigen, 12  
*dubius* Matsumura, *Syrphus*, 41  
*elegans* Schummel, *Sphegina*, 94  
*Epistrophe* Walker, 13–16  
*Episyrphus* Matsumura et Adachi, 17–18  
*equestris* (Fabricius), *Merodon*, 101  
*ericetorum formosae* Bezzi, *Asarkina*, 2  
*Eristalinus* Londani, 105–108  
*Eristalis* Latreille, 109–112  
*errans* (Kanervo), *Metasyrphus*, 28  
*Eumerus* Meigen, 96–100  
*eurasiatica* Stackelberg, *Mallota*, 120  
*excavatus* (Matsumura), *Dasysyrphus*, 6  
*facialis* Shiraki, *Cheilosia*, 73  
*facultas* (Harris), *Melanostoma*, 52  
*fallaciosus* Matsumura, *Episyrphus*, 17  
*fasciata* (Macquart), *Didea*, 9  
*fasciatus* Coquillett, *Paragus*, 60  
*femoratus* Meigen, *Paragus*, 59  
*Ferdinandea* Rondani, 80–82  
*ferrugineus* (Fabricius), *Merodon*, 101  
*festivum* (Linnaeus), *Chrysotoxum*, 46  
*flava* Macquart, *Sphegina*, 94  
*flavicans* (Fabricius), *Merodon*, 101  
*flavicauda* Zetterstedt, *Sphaerophoria*, 37  
*flaviceps* (Matsumura), *Mesembrius*, 124  
*flavimaculata* Matsumura, *Pipiza*, 64  
*flaviventris* (Macquart), *Metasyrphus*, 25  
*flavoabdominalis* Brunetti, *Sphaerophoria*, 31  
*flavoscutellata* (Girschner), *Scaeva*, 30  
*floreae* Violovitsh, *Mallota*, 119  
*foersteri* (Meigen), *Didea*, 9  
*formosa* (Harris), *Epistrophe*, 13  
*frequens* Matsumura, *Helophilus*, 116  
*frequens* Matsumura, *Metasyrphus*, 28  
*frequense* Matsumura, *Temnostoma*, 139  
*frontalis* (Shiraki et Edashige), *Xylota*, 147  
*fulvicauda* Bigot, *Sphaerophoria*, 33  
*fulvifrons* (Macquart), *Metasyrphus*, 25  
*funeralis* Meigen, *Eumerus*, 100  
*fusca* (Scopoli), *Eristalis*, 112  
*fuscipennis* Shiraki, *Cheilosia*, 74  
*geographicum* (Geoffroy in Fourcroy), *Chrysotoxum*, 46  
*glaucius* (Linnaeus), *Ischyrosyrphus*, 19  
*gracile* (Meigen), *Melanostoma*, 53  
*grande* Matsumura, *Chrysotoxum*, 47  
*grandicornis* Meigen, *Eumerus*, 100  
*griseofasciatus* (Matsumura), *Eumerus*, 100  
*grossulariae* (Meigen), *Epistrophe*, 13  
*haemorrhous* (Meigen), *Paragus*, 56  
*harimensis* (Matsumura), *Sphaerophoria*, 38  
*Helophilus* Meigen, 115–117  
*hieroglyphica* (Meigen), *Sphaerophoria*, 36  
*hirayamae* (Matsumura), *Sphaerophoria*, 33  
*hortorum* Meigen, *Eristalis*, 112  
*hyalinatus* (Fallén), *Xanthandrus*, 54  
*ignava* (Panzer), *Xylota*, 148  
*iidai* Shiraki, *Eumerus*, 97  
*illucida* Walker, *Syrpita*, 141  
*illustrata* (Harris), *Cheilosia*, 75  
*imbelle* (Harris), *Chrysotoxum*, 46  
*incerta* (Wiedemann), *Sphaerophoria*, 37  
*incisum* Matsumura, *Melanostoma*, 51  
*incisuralis* Loew, *Eristalis*, 110  
*indiana* Bigot, *Sphaerophoria*, 34  
*inermis* Becker, *Xylota*, 148  
*infuscatum* Loew, *Chrysotoxum*, 46  
*inornata* Matsumura, *Pipiza*, 65  
*inornatum* Matsumura, *Melanostoma*, 52  
*interrupta* (Poda), *Eristalis*, 112  
*interruptum* Matsumura, *Melanostoma*, 52  
*interruptus* Ringdahl, *Syrphus*, 39  
*Ischyrosyrphus* Bigot, 19–20  
*japonica* (Shiraki), *Blera*, 126  
*japonica* Matsumura, *Didea*, 8  
*japonica* Shiraki et Edashige, *Sphegina*, 93  
*japonica* Shiraki, *Sericomyia*, 95  
*japonica* van der Goot, *Eristalis*, 111  
*japonicum* Hull, *Temnostoma*, 138  
*japonicum* Matsumura, *Chrysotoxum*, 46  
*japonicum* Shiraki, *Chrysotoxum*, 49  
*japonicus* Matsumura, *Eumerus*, 98  
*japonicus* Matsumura, *Syrphus*, 39  
*japonicus* Yano, *Microdon*, 150  
*javana* (Wiedemann), *Allograpta*, 1  
*jeddona* Bigot, *Volucella*, 86  
*jesoensis* Matsumura, *Matsumyia*, 130  
*jezoensis* Matsumura, *Microdon*, 150  
*jezoensis* Matsumura, *Syrphus*, 39  
*jozankeanum* (Matsumura), *Temnostoma*, 140  
*jozanus* Matsumura, *Paragus*, 57  
*karumaiensis* (Matsumura), *Orthoneura*, 92  
*kawamurai* Matsumura, *Merodon*, 102  
*kitakawae* Matsumura, *Syrphus*, 41  
*komabensis* Matsumura, *Metasyrphus*, 26  
*kongosanensis* Shiraki, *Eumerus*, 99  
*koreana* Bankowska, *Sphaerophoria*, 35  
*koreana* Enderlein, *Mallota*, 121

- kotoriensis* Matsumura, *Syrphus*, 39  
*kuccharensis* Matsumura, *Syrphus*, 39  
*kumamotensis* (Matsumura), *Sphaerophoria*, 33  
*kushirensis* Matsumura, *Syrphus*, 41  
*kuwayamae* (Matsumura), *Sphaerophoria*, 38  
*lacerus* (Meigen), *Metasyrphus*, 25  
*laevigata* Loew, *Rhingia*, 83  
*laevigatum* (Meigen), *Melanostoma*, 52  
*lamagawanus* Matsumura, *Paragus*, 59  
*laphriformis* (Fallén), *Brachypalpus*, 142  
*lasiophthalma* (Zetterstedt), *Melangyna*, 22  
*lateralis* Matsumura, *Helophilus*, 115  
*laternarius* (Müller), *Ischyrosyrphus*, 20  
*latus* (Coquillett), *Dideoides*, 11  
*lautus* (Coquillett), *Dideoides*, 10  
*Leucozona* Schiner, 21  
*leucozonus* (Germar), *Ischyrosyrphus*, 19  
*longiptera* Shiraki, *Cheilosia*, 76  
*longus* (Coquillett), *Chalcosyrphus*, 143  
*lucorum* (Linnaeus), *Leucozona*, 21  
*luniger* (Meigen), *Metasyrphus*, 27  
*lunulatus* Meigen, *Eumerus*, 100  
*luteipes* Shiraki, *Cheilosia*, 77  
*lutescens* Doleschall, *Syritta*, 141  
*lyra* (Harris), *Eristalis*, 109  
*macrocerca* Stackelberg, *Sphegina*, 93  
*macrogaster* (Thomson), *Sphaerophoria*, 35  
*maculata* Walker, *Baccha*, 44  
*maculifer* Matsumura, *Syrphus*, 39  
*maculosum* (Meigen), *Melanostoma*, 53  
*magnifica* (Hellén), *Cheilosia*, 75  
*Mallota* Meigen, 118–123  
*maricolor* (Enderlein), *Metasyrphus*, 27  
*matsumurai* Shiraki, *Spilomyia*, 135  
*matsumurana* (Shiraki), *Cheilosia*, 77  
*Matsumyia* Shiraki, 130–131  
*melanatum* Kanervo, *Melanostoma*, 52  
*Melangyna* Verrall, 22  
*melanopus* Rondani, *Eumerus*, 100  
*Melanostoma* Schiner, 51–53  
*Meliscaeva* Frey, 23  
*melissae* (Meigen), *Sphaerophoria*, 36  
*mellarium* (Meigen), *Melanostoma*, 52  
*mellina* (Harris), *Scaeva*, 30  
*mellinum* Linnaeus, *Melanostoma*, 52  
*melliturgum* Meigen, *Melanostoma*, 52  
*menthastri* (Linnaeus), *Sphaerophoria*, 36  
*meridionalis* Becker, *Paragus*, 59  
*Merodon* Meigen, 101–102  
*Mesembrius* Rondani, 124–125  
*Metasyrphus* Matsumura, 24–28  
*Microdon* Meigen, 149–151  
*Milesia* Latreille, 132  
*minutum* (Macquart), *Melanostoma*, 52  
*miyakei* (Matsumura), *Ischyrosyrphus*, 19  
*mogolicus* Kanervo, *Paragus*, 59  
*moiuanus* Matsumura, *Syrphus*, 39  
*Monoceromyia* Shannon, 104  
*monochaetus* (Loew), *Platycheirus*, 55  
*montivaga* (Violovitsh), *Criorhina*, 128  
*motodomariensis* Matsumura, *Cheilosia*, 78  
*mutatus* (Zetterstedt), *Ischyrosyrphus*, 20  
*narcissi* (Fabricius), *Merodon*, 101  
*narumii* Shiraki, *Narumyia*, 133  
*Narumyia* Shiraki, 133  
*nectareus* (Fabricius), *Episyrphus*, 17  
*nectarinus* (Wiedemann), *Episyrphus*, 18  
*niger* Shiraki, *Mesembrius*, 125  
*nigra* Meigen, *Sphegina*, 94  
*nigricans* Coquillett, *Volucella*, 87  
*nigricans* Matsumura, *Eristalis*, 111  
*nigriceps* Shiraki, *Sericomyia*, 95  
*nigricorne* Strobl, *Melanostoma*, 52  
*nigricornis* Macquart, *Sphegina*, 94  
*nigrifemoratus* (Macquart), *Metasyrphus*, 27  
*nigrifrons* (Egger), *Ferdinandea*, 81  
*nigrigena* Enderlein, *Syrphus*, 39  
*nigripila* Mik, *Leucozona*, 21  
*nigritarsis* Brunetti, *Sphaerophoria*, 34  
*nigrithorax* Bezzi, *Merodon*, 101  
*nigrithrax* Zimina, *Volucella*, 86  
*nigritus* Gimmerthal, *Paragus*, 59  
*nigroepistomata* Shiraki et Edashige, *Epistrophe*, 14  
*nigrofacies* Shiraki, *Matsumyia*, 131  
*nigrofemoratus* Meigen, *Metasyrphus*, 27  
*nigropicta* Portschesky, *Volucella*, 88  
*nikkoensis* (Matsumura), *Melangyna*, 22  
*nitens* (Stackelberg), *Blera*, 127  
*nitens* (Villers), *Ferdinandea*, 80  
*nitens* (Zetterstedt), *Metasyrphus*, 28  
*nitidicollis* (Meigen), *Epistrophe*, 15  
*nitidicollis* Zetterstedt, *Sphaerophoria*, 37  
*nitobei* Matsumura, *Temnostoma*, 138  
*nitobei* Matsumura, *Volucella*, 89  
*nobilis* (Meigen), *Ischyrosyrphus*, 19  
*nobilis* Meigen, *Merodon*, 101  
*nohirae* Matsumura, *Paragus*, 61  
*numida* Macquart in Lucas, *Paragus*, 59  
*obfuscata* (Gmelin), *Eristalis*, 112  
*obscuripes* Kanervo, *Melanostoma*, 52  
*obscurus* Meigen, *Paragus*, 59  
*ochiaianum* Matsumura, *Melanostoma*, 52  
*ochripes* (Shiraki), *Cheilosia*, 79  
*ocularius* (Coquillett), *Eristalis*, 107  
*ogasawarae* Matsumura, *Melanostoma*, 52  
*ogasawarae* Matsumura, *Paragus*, 59  
*oitanus* Shiraki, *Microdon*, 151  
*okadensis* Matsumura, *Syrphus*, 39  
*okunii* (Matsumura), *Dasysyrphus*, 7  
*oleandri* Rondani, *Sphaerophoria*, 37  
*olitorius* (Fallén), *Metasyrphus*, 25  
*omogensis* Shiraki et Edashige, *Epistrophe*, 16  
*orientalis* Macquart, *Syritta*, 141  
*Orthoneura* Macquart, 92  
*pallidus* (Bigot), *Metasyrphus*, 25  
*pallipes* (Stackelberg), *Blera*, 127

- pallipes* Matsumura, *Paragus*, 56  
*palliventralis* Matsumura, *Syrphus*, 41  
*panzeri* Rondani, *Callicera*, 84  
*Paragus* Latreille, 56–61  
*paralleli* (Harris), *Eristalis*, 109  
*Parasyrphus* Matsumura, 29  
*pellucens* (Harris), *Leucozona*, 21  
*pellucens* tabanoides Motschulsky, *Volucella*, 90  
*pellucidula* (Wiedemann in Meigen), *Didea*, 8  
*permagma* Stackelberg, *Spilomyia*, 136  
*Phytomia* Guérin-Ménéville, 113  
*picta* (Meigen), *Sphaerophoria*, 36  
*pictus* (Macquart), *Eristalinus*, 106  
*Pipiza* Fallén, 62–66  
*Pipizella* Rondani, 67  
*planifrons* Meigen, *Eumerus*, 100  
*Platycheirus* Le Peletier et Serville, 55  
*pleuralis* (Coquillett), *Monoceromyia*, 104  
*pleuralis* (Thomson), *Episyrphus*, 17  
*politus* Wiedemann, *Paragus*, 58  
*polonica* Szilády, *Eristalis*, 109  
*porcina* (Coquillett), *Asarkina*, 3  
*porcina* (De Geer), *Eristalis*, 112  
*portschinskiana* Stackelberg, *Cheilosia*, 75  
*praecincta* (Scopoli), *Leucozona*, 21  
*primus* Loew, *Triglyphus*, 69  
*profuges* (Harris), *Doros*, 12  
*proximus* (Santos Abreu), *Episyrphus*, 17  
*Pseuderistalis* Shiraki, 114  
*Psilota* Meigen, 103  
*Pterallastes* Loew, 134  
*pulcherrimus* Strobl, *Paragus*, 61  
*pyrastris* (Linnaeus), *Scaeva*, 30  
*pyrorum* (Schrank), *Metasyrphus*, 25  
*quadrifasciatus* Meigen, *Paragus*, 61  
*quadriguttulus* (Matsumura), *Xanthandrus*, 54  
*quinquestriatus* (Fabricius), *Eristalinus*, 106  
*reductus* (Čepelák), *Xanthandrus*, 54  
*Rhingia* Scopoli, 83  
*ribesii* (Linnaeus), *Syrphus*, 39  
*rosae* (De Geer), *Scaeva*, 30  
*rueppelli* (Wiedemann), *Sphaerophoria*, 37  
*ruficornis* (Fabricius), *Ferdinandea*, 82  
*rufitarsis* Strobl, *Eumerus*, 100  
*rupestris* (Panzer), *Cheilosia*, 75  
*rutilo* (Harris), *Ferdinandea*, 80  
*sachalinense* Matsumura, *Melanostoma*, 52  
*sachalinensis* (Matsumura), *Ischyrosyrphus*, 20  
*sachalinensis* Matsumura, *Didea*, 8  
*sachalinensis* Matsumura, *Eristalis*, 110  
*sachalinica* Stackelberg, *Sericomyia*, 95  
*saghalinensis* (Matsumura et Adachi), *Melangyna*, 22  
*sapporensis* Matsumura, *Chrysotoxum*, 48  
*sapporensis* Matsumura, *Helophilus*, 115  
*sapporoensis* (Shiraki), *Chalcosyrphus*, 144  
*Scaeva* Fabricius, 30  
*scalare* (Fabricius), *Melanostoma*, 53  
*scitule* (Harris), *Episyrphus*, 17  
*scitulus* (Harris), *Episyrphus*, 17  
*scutellare* Loew, *Chrysotoxum*, 46  
*serarius* (Wiedemann), *Betasyrphus* 4  
*Sericomyia* Meigen, 95  
*sericomylaeforme* (Portschinsky), *Temnostoma*, 140  
*serpilli* Rondani, *Sphaerophoria*, 37  
*sexguttata* (Meigen), *Melangyna*, 22  
*sexmaculata* Matsumura, *Volucella*, 88  
*shibatensis* (Matsumura), *Sphaerophoria*, 33  
*shibechensis* Matsumura, *Syrphus*, 41  
*shirakii* Matsumura, *Chrysotoxum*, 49  
*sibiricum* (Portschinsky), *Temnostoma*, 140  
*sibiricum* Loew, *Chrysotoxum*, 50  
*sigillatus* Curtis, *Paragus*, 56  
*signata* Meigen, *Pipiza*, 66  
*signatus* (Santos Abreu), *Episyrphus*, 17  
*sinensis* (Gmelin), *Phytomia*, 113  
*sinensis* Wiedemann, *Eristalis*, 112  
*sinuatus* (Palma), *Parasyrphus*, 29  
*Sphaerophoria* Le Peletier et Serville, 31–38  
*Sphegina* Meigen, 93–94  
*Spilomyia* Meigen, 135–137  
*Stenopipiza* Matsumura, 68  
*strandii* Duda, *Eristalis*, 109  
*strandii* Duda, *Ischyrosyrphus*, 19  
*strigatus* (Fallén), *Eumerus*, 100  
*strigosum* Sack, *Temnostoma*, 140  
*subabiens* (Stackelberg), *Xylota*, 145  
*subillustrata* Stakelberg, *Cheilosia*, 78  
*suzukii* (Matsumura), *Sphaerophoria*, 38  
*suzukii* Matsumura, *Ferdinandea*, 80  
*suzukii* Matsumura, *Spilomyia*, 137  
*suzukii* Matsumura, *Volucella*, 91  
*sylvatica* Meigen, *Eristalis*, 112  
*Syritta* Le Peletier et Serville, 141  
*Syrphus* Fabricius, 39–41  
*taeniata* (Meigen), *Sphaerophoria*, 38  
*takasagensis* (Matsumura), *Sphaerophoria*, 33  
*takasagoensis* Matsumura, *Mallota*, 122  
*tarsalis* (Macquart), *Eristalinus*, 107  
*tashikaganus* Matsumura, *Syrphus*, 39  
*Temnostoma* Le Peletier et Serville, 138–140  
*tenax* (Linnaeus), *Eristalis*, 112  
*tenuis* Matsumura, *Syrphus*, 39  
*terminalis* (Wiedemann), *Metasyrphus*, 25  
*testacicornis* Rondani, *Ferdinandea*, 80  
*tetragonus* (Geoffroy in Fourcroy), *Syrphus*, 39  
*tibialis* (Fallén), *Paragus*, 59  
*tomentosum* Giglio-Tos, *Chrysotoxum*, 46  
*topiarius* Meigen, *Syrphus*, 41  
*torvus* (Osten Sacken), *Syrphus*, 40  
*transcendens* (Szilády), *Metasyrphus*, 27  
*transfuga* (Fabricius), *Scaeva*, 30  
*transversalis* Meigen, *Merodon*, 101  
*trianguliferus* Zetterstedt, *Paragus*, 56  
*tricinctus* (Fallén), *Dasysyrphus*, 7  
*tricolor* Loew, *Mallota*, 123  
*trifasciata* Shiraki, *Criorhina*, 129

*Triglyphus* Loew, 69  
*tsukisappensis* Matsumura, *Syrphus*, 39  
*tuberculatus* Rondani, *Merodon*, 101  
*undulata* Vollenhoven, *Milesia*, 132  
*undulatus* (Čepelák), *Xanthandrus*, 54  
*unicolor* (Macquart), *Melanostoma*, 52  
*unicolor* (Sack), *Cheilosia*, 78  
*unicolor* (Shiraki), *Pterallastes*, 134  
*unicolor* Curtis, *Scaeva*, 30  
*unicolor* Shiraki, *Cheilosia*, 78  
*unifasciata* (Strobl), *Meliscaeva*, 23  
*ussuriana* (Stackelberg), *Orhoneura*, 92  
*vacuus* (Scopoli), *Syrphus*, 39  
*validus* Wiedemann in Meigen, *Merodon*, 101  
*variofasciatus* Becker, *Paragus*, 61  
*varipes* (Bigot), *Paragus*, 59  
*velox* Matsumura, *Syrphus*, 39  
*ventralis* Thomson, *Eristalis*, 112  
*vernalis* Suster, *Ischyrosyrphus*, 19  
*vespiforme* Linnaeus, *Temnostama*, 140  
*vespiformis* (Matsumura), *Doros*, 12  
*virgatus* Coquillett, *Helophilus*, 116  
*viridis* (Coquillett), *Eristalinus*, 108  
*vitripennis* Meigen, *Syrphus*, 41  
*Volucella* Geoffroy, 85–91  
*vulgare* (Portschinsky), *Temnostama*, 140  
*vulgaris* (Scopoli), *Eristalis*, 112  
*ulpina* Meigen, *Eristalis*, 112  
*Xanthandrus* Verrall, 54  
*Xanthogramma* Schiner, 42  
*Xylota* Meigen, 145–148  
*yamahanensis* Matsumura, *Syrphus*, 39  
*zetterstedti* (Fallén), *Temnostama*, 138  
*zetterstedti* (Verhoff), *Parasyrphus*, 29  
*zodinus* Matsumura, *Helophilus*, 117  
*zonalis* (Fabricius), *Phytomia*, 113  
*zonata* (Fabricius), *Phytomia*, 113  
*zonatus* Meigen, *Paragus*, 59

## APPENDIX 2. INDEX TO KOREAN NAMES

(\*Species number)

- 가늘줄납작꽃등에, 23\*  
 가로무늬꽃등에, 20  
 개미꽃등에, 149  
 개미허리꽃등에, 12  
 검은이마큰별꽃등에, 81  
 검정갈벌꽃등에, 74  
 검정넓적꽃등에, 4  
 검정대모꽃등에, 87  
 검정뒤영꽃등에, 118  
 검정루리꽃등에, 105  
 검정배수증다리꽃등에, 125  
 검정점꽃등에, 65  
 검정주둥이꽃등에, 14  
 곶꽃등에, 56  
 곶술넓적꽃등에, 55  
 광꽃등에, 53  
 광불이꽃등에, 52  
 광배긴수염꽃등에, 84  
 광뿔꽃등에, 58  
 구건꽃등에, 15  
 굵은줄납작꽃등에, 16  
 극동긴꽃등에, 136  
 금강산알뿌리꽃등에, 99  
 긴애꽃등에, 38  
 긴허리꽃등에, 143  
 꼬마꽃등에, 36  
 꽃등에, 112  
 끝납작꽃등에, 18  
 끝검정꽃등에, 21  
 끝검정알락꽃등에, 43  
 끝노랑꽃등에, 10  
 나루미꽃등에, 133  
 난쟁이별꽃등에, 70  
 남꽃등에, 31  
 남색무늬넓적꽃등에, 19  
 넉점박이꽃등에, 54  
 넓적꽃등에, 3  
 네줄박이좁꽃등에, 61  
 노랑가슴꽃등에, 114  
 노랑배수증다리꽃등에, 124  
 노랑벌꿀넓적꽃등에, 41  
 노랑줄꽃등에, 5  
 노랑허리꽃등에, 148  
 눈루리꽃등에, 107  
 니토배대모꽃등에, 89  
 닳무늬꽃등에, 30  
 대만넓적꽃등에, 24  
 대모꽃등에, 86  
 대왕꽃등에, 13  
 대풍꽃등에, 35  
 덩굴꽃등에, 109  
 도래마디가시꽃등에, 141  
 두눈박이꽃등에, 80  
 두점줄꽃등에, 7  
 두줄꽃등에, 6  
 두흰점꽃등에, 67  
 뒤영벌꽃등에, 131  
 뒷가슴가시털별꽃등에, 79  
 루리꽃등에, 108  
 루리허리꽃등에, 146  
 루펠꽃등에, 37  
 마즈무라긴꽃등에, 135  
 말벌꽃등에, 140  
 먹벌꽃등에, 77  
 멍꽃등에, 8  
 멍월넓적꽃등에, 9  
 무늬넓적꽃등에, 60  
 무늬별꽃등에, 78  
 물결넓적꽃등에, 28  
 반월넓적꽃등에, 27  
 배두눈꽃등에, 51  
 배새줄꽃등에, 138  
 배점박이꽃등에, 62  
 배줄꽃등에, 68  
 배짧은꽃등에, 110  
 벌불이꽃등에, 104  
 벌꽃등에, 75  
 벌넓적꽃등에, 25  
 벌불이꽃등에, 92  
 보라무늬꽃등에, 22  
 북방알뿌리꽃등에, 96  
 북방허리꽃등에, 127  
 삼색꽃등에, 123  
 샷포로수염치레꽃등에, 48  
 샷포로수증다리꽃등에, 115  
 수선화꽃등에, 101  
 수염치레꽃등에, 46  
 수증다리꽃등에, 116  
 수증다리불이꽃등에, 117  
 스즈किन꽃등에, 137  
 시베리아긴코꽃등에, 128  
 시베리아수염치레꽃등에, 50  
 쌍점박이꽃등에, 142  
 쌍형꽃등에, 119  
 알락긴꽃등에, 132  
 알락꽃등에, 44  
 알락허리꽃등에, 147  
 알뿌리꽃등에, 100  
 애꽃등에, 33  
 애꽃벌불이별꽃등에, 72  
 애두눈박이꽃등에, 82  
 어리대모꽃등에, 90  
 어리알락긴꽃등에, 139  
 얼굴벌꽃등에, 73  
 얼룩무늬노랑꽃등에, 11  
 예조벌꽃등에, 130  
 오스트리아꽃등에, 63  
 오줄루리꽃등에, 106  
 왕개미꽃등에, 151  
 왕꽃등에, 113  
 왕진흙꽃등에, 122  
 유라시아꽃등에, 120  
 육점박이꽃등에, 26  
 육점박이대모꽃등에, 88  
 이이다알뿌리꽃등에, 97  
 인도꽃등에, 34  
 일본수염치레꽃등에, 49  
 일본알뿌리꽃등에, 98  
 일본잠자리꽃등에, 93  
 잔털꽃등에, 103  
 잠자리꽃등에, 94  
 장수말벌집대모꽃등에, 91  
 자바꽃등에, 1  
 점꽃등에, 64  
 점박이긴코꽃등에, 129  
 조산꽃등에, 57  
 좁개미꽃등에, 150  
 좁검정꽃등에, 66  
 좁꽃등에, 69  
 좁넓적꽃등에, 39  
 줄꽃등에, 29  
 줄아리꽃등에, 59  
 줄꽃등에, 95  
 진꽃등에, 83  
 진흙꽃등에, 102  
 참꽃등에, 42  
 참대모꽃등에, 85  
 청람색허리꽃등에, 145  
 청진꽃등에, 32  
 큰날개벌꽃등에, 76  
 큰수염치레꽃등에, 47  
 큰허리꽃등에, 126  
 타이완납작꽃등에, 2  
 털좁넓적꽃등에, 40  
 한국수염치레꽃등에, 45  
 한국털꽃등에, 121  
 호리꽃등에, 17  
 홍다리꽃등에, 144  
 황가슴꽃등에, 134  
 흐린날개벌꽃등에, 71  
 흰줄꽃등에, 111

## 한국산 꽃등에과의 분류학적 목록

한호연, 최득수, 김진일,<sup>1)</sup> 변혜우

연세대학교 문리대학 생명과학과

<sup>1)</sup>성신여자대학교 생물학과

한국산 꽃등에과에 관한 문헌들을 정리한 결과 총 3아과 16족 62속에 속하는 151종의 목록을 작성하였다. 한국산 꽃등에과에 관한 기록들은 주로 곤충상조사의 일환으로 발표된 수많은 보고서 등에 산재되어 있었으므로 한국산 종들이 언제 어디에서 채집되어 어떤 문헌에 기록되었는지 찾아보기 쉽도록 정리하였다. 그러나 이 목록에 수록된 종들의 정확한 동정여부는 현 단계에서는 확인하지 않았으므로 앞으로는 실제 표본에 입각한 장기적이고도 체계적인 연구를 위한 기반을 제공하고자 한다.

검색어 : 파리목, 꽃등에과, 한국목록, 분포

(Received: October 30, 1997)

(Accepted: July 20, 1998)